Engineering Computing Fee: Budget Allocations For Fiscal year 2008

Date: July 1, 2007 (FINAL RELEASE)
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### SUMMARY OF ALLOCATIONS FOR FY 2008

**College-Wide Priority Commitments**

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<tr>
<th>Description</th>
<th>Proposed</th>
<th>Funded</th>
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<td>Computer Lab Expendables &amp; Student Staffing</td>
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**College-Wide Priority Commitments Subtotal**  
$510,037  
$510,037

**Operating Expense Proposals**

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<tr>
<th>College</th>
<th>AERE</th>
<th>ABE</th>
<th>CBE</th>
<th>CCEE</th>
<th>ECPE</th>
<th>IMSE</th>
<th>MSE</th>
<th>ME</th>
<th>ECSS</th>
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**Operating Expense Proposals Subtotal**  
$450,605  
$373,240

**Software Portfolio Proposals**

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<td>Adobe Photoshop</td>
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<td>Flight Simulator</td>
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<td>N ectc am W atcher Pro</td>
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**AERE Subtotal**  
$12,150  
$10,950

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<tr>
<td>ABE and ME Joint MatLAB Toolbox</td>
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<td>LogixPro PLC Simulation Software</td>
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<td>Moldflow Plastics Advisor</td>
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**ABE Subtotal**  
$9,260  
$9,260

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<td>HySYS</td>
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**CBE Subtotal**  
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$4,100

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**CCEE Subtotal**  
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**Software Portfolio Proposals Subtotal**

$274,108 $197,059

Engineering Computing Fee Allocations, FY08  3/7/2007
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<th>Capital Projects Proposals</th>
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<td>AERE 3D CAD/CAM Station</td>
<td>26,840</td>
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</tr>
<tr>
<td>ECPE Coover 1212 Computer &amp; Printer Upgrade</td>
<td>33,000</td>
<td>17,000</td>
</tr>
<tr>
<td>ECSS ENGR GRID – PHASE I</td>
<td>150,000</td>
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<tr>
<td>IMSE IMSE Black 0010 Upgrade</td>
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</tr>
<tr>
<td>ECSS Lab Upgrade for 2260 Hoover</td>
<td>22,400</td>
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<tr>
<td>ECSS Lab Upgrade for 2268 Hoover</td>
<td>64,220</td>
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<tr>
<td>AERE Laptops for Lecturers</td>
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<tr>
<td>ME ME Course Development Mobile Systems</td>
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<tr>
<td>ME ME Black Rm. 0066 Upgrade</td>
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<tr>
<td>ME Multimedia Center for Rms. 3004-3006 Black</td>
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<td>2,500</td>
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<tr>
<td>CBE Upgrade 2126 Sweeney Linux Lab</td>
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<td>ECSS Virtualization Server Expansion</td>
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<td>ECPE Coover Plotter Replacement</td>
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<td>Department</td>
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<td>------------</td>
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<tr>
<td>MSE</td>
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<tr>
<td>ME</td>
<td>ME Black 2070 Computer Lab</td>
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<tr>
<td>ME</td>
<td>ME Black 2081 Instrumentation Lab Upgrade</td>
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<tr>
<td>ME</td>
<td>ME Black Small Teaching Lab Upgrade</td>
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<tr>
<td>ME</td>
<td>ME Hoover 1360 Mechatronics Lab</td>
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<td>ECPE</td>
<td>Coover 1212 O-Scope Upgrade</td>
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<td>ECPE</td>
<td>Coover 1301 Intro to Embedded Systems</td>
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<td>Durham Antenna/Microwave Labs Upgrade</td>
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<td>Laptop Computers for Graduate Students</td>
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<td>ME</td>
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<td>ME</td>
<td>Oscilloscopes Upgrades</td>
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<td>AERE</td>
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<td>Robotics &amp; Measurement: CE &amp; SE Problem Solving</td>
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<td>IMSE</td>
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**Capital Projects Proposals Subtotal** | **1,960,638** | **$837,000**

<p>| | | |</p>
<table>
<thead>
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<th></th>
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<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>$3,167,671</strong></td>
<td><strong>$1,823,126</strong></td>
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</table>
EFTF COMMITTEE MEMBERS

Faculty & Staff Representatives
Zachary, Loren – ENG Admin, Chair (non-voting)
Wang, Z. J. – AerE
Raman, Raj – ABE
Lamm, Monica – CBE
Walters, Russ – CCEE
Dalal, Vikram – ECpE
Jackman, John – IMSE
Genalo, Larry – MSE
Winer, Eliot – ME
Bowman, Mike – AIT
McCoy, Chris – ECSS, Facilitator (non-voting)
Alt, Jamie – ECSS, Staff liaison (non-voting)

Student Representatives
Ryon, Jason – AerE
Warnke, Isaiah – AerE
Bolson, Jacob – ABE
Murphy, Patrick – ABE
Lauterbach, Brenda – CBE
Suek, Nicholas – CBE
Marbach, Lee – CCEE
Jirak, Jason – ECpE
Stieler, Dan – ECpE
Walker, Justin – IMSE
Law, Megan – IMSE
Frerichs, Andy – MSE
Rosenberger, Cherra – MSE
Hillary, Ryan – ME
Kemp, Zachary – ME

ECRT PANEL MEMBERS

Engineering Computing Round Table (eCRT)
Wellman, Jim – AerE
Kuuttila, Alan – ABE
Schlagel, Don – CBE
Kovarik, Steven – ECpE
Renze, Mike – IMSE
Steed, Hap – ME
Klesel, Josh – MSE/CCEE
Dickerson, John – ECSS
McCoy, Chris – ECSS (non-voting)
Alt, Jamie – ECSS (non-voting)
The New Engineering Computing Fee Allocation Model

Beginning Spring 2006 the College of Engineering implemented a new process for allocating approximately $1.7 million in funds obtained annually through the Engineering Computing Fee. The process changed from one of allocating funds using a mathematical driven model based upon enrollment and service-course credits, to a process of allocating funds using a proposal-driven model based upon need and alignment with the college’s Seamless IT Initiative and IT vision.

The new model provides for the continued funding of a number of college-wide priorities including salaried employees funded by the Engineering Computing Fee in FY06/07, college-wide software, and printing supplies (toner and paper). All remaining funds will be allocated through a proposal-based system from one of three different proposal categories: Capital Projects, Operating Expense, and Software Portfolio.

College-Wide Priority Commitments

The new funding model assumes recurring commitments for several expenses. These expenses, which are commonly called “off-the-top” expenditures, are priority commitments that reduce the funds available for allocation from the proposal pool.

P&S Salary Support
A number of staff positions are paid using Engineering Computing Fee funds. Under the old model, these funds were drawn from departmentally allocated funds. The dean has agreed to continue funding these positions as a priority in the new model until he is able to identify other sources of funds. As a result, these funds will be held in reserve before other commitments are made.

College Software Portfolio
One of the goals that Dean Kushner communicated was to have software widely available throughout the college to all students and instructors. As such, the portfolio of software that will be used should be as rich as possible. eCRT has worked hard to identify software that should be part of this pool. In many cases, software that has a long history of being paid through departmental Engineering Computing Fee allocations is being consolidated into the college software portfolio.

Printing Supplies
Prior to FY07 printing was not coordinated throughout the college – some departments worked together to use various printer accounting solutions and others used localized solutions. Beginning Fall FY07 a single printer accounting solution will be used across the entire college. This system will allow any student from any department to print on any printer for which they have access. As a result, it is reasonable to consolidate the purchase of printing supplies into one accounting scheme handled centrally so that any given department was not penalized for supporting more students than another. The use of printing will be monitored and managed by the eCRT team to implement a solution which provides a feature-rich environment to the student balanced with good stewardship practices. The EFTP Committee and the dean will hold eCRT accountable for this solution.

Lab Operating Expenses (new for FY2008)
Beginning FY2008, lab monitors will be coordinated across the college in one of two “zones” – north and south. The south zone will consist of Black (ME/IMSE), Hoover (MSE/ECSS), and Howe (AERE). The north zone will consist of Town (CCEE), Coover (ECPE), Sweeney (CBE), Davidson (ABE/AST), and I ED II (ABE/AST). Lab monitor teams will provide security, cleaning, and stock supplies according to the new model as recommended and implemented for FY2007.
Description of Proposal Categories

Proposals will be evaluated in a multi-tiered process that includes the Engineering Computing Round Table (eCRT), the College EFTF Committee, and the Dean of Engineering. Preference will be given to projects which address the following goals:

- Advance the Seamless IT environment
- Impact a broad range of students
- Are collaborative, cooperative, and standards-based
- Cross department boundaries
- Advance the state of the art in instruction
- Contribute to the college’s goal of being a top-ranked academic institution

Although funds may be allocated for projects preferentially addressing the needs of a specific department, services or equipment supported by Engineering Computer Fee funds must be accessible to all students in the College of Engineering.

To assist in properly analyzing the value of each proposal three categories have been developed to group the proposals appropriately.

**Capital Project Proposals**
A separate proposal must be submitted for each capital project. A capital project is defined as a discrete collection of hardware for a specific location or purpose that is expected to last 2-4 years and cost more than $5,000. Commonly, this is a laboratory or server. The proposal is a good-faith estimate and a request to spend funds not to exceed an authorized amount during the fiscal year to complete the project.

**Operating Expense Proposals**
Each department and ECSS will complete one proposal for operating expenses for the fiscal year. The proposal is an estimate and a request to spend funds not to exceed an authorized amount during the fiscal year. The amount of the proposal is a good-faith estimate in four sub-categories:

1. **Expendables** - Includes items that are consumed over a relatively short period of time such as storage media (CD blanks, floppy disks, memory sticks, etc.), office supplies (binders, staples, cable labels, etc.), cleaning supplies (degreaser, rags, paper towels, Windex, etc.), and lab supplies (erasers, markers, etc.).
2. **Maintenance** - Includes resources and work for the repair and upkeep of computing equipment such as tools (screwdrivers, meters, etc.), printer maintenance (kits, scheduled service, etc.), off-warranty repair (projector bulbs, hard disks, memory cards, etc.), and certification (Dell "Warranty Parts Direct Certification", etc.).
3. **Infrastructure** - Includes recurring charges for the upkeep of infrastructure services such as telecommunications (phone, data, switches, cables, etc.), insurance (lab computers, servers, etc.), and SSL certificates.
4. **Hourly Staffing** - Includes support for appropriate staff pay and services such as student hourly positions (lab assistants, support staff, etc.), resources (books, magazines, TechNet subscriptions, etc.), training (conferences, certifications, etc.). **NOTE**: Full time staff salaries are **NOT** to be included in this proposal.

**Software Portfolio Proposals**
Each department and ECSS will complete one proposal for software portfolio for the fiscal year. The proposal encompasses two main purposes (1) to verify the need to retain college-wide software licenses, and (2) to allow departments to maintain a suite of software of localized interest. There are two parts to the proposal:

1. Verification of college-wide software (department “vote” to retain software)
2. Request for funding to support departmental-specific software
## MULTI-YEAR BALANCE SHEET

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budgetted Balance Forward</td>
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<td>$175,168</td>
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<td>$128,533</td>
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<tr>
<td>Reserve Forward</td>
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<td>$0</td>
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<td>Income from Fees *</td>
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<td>$1,700,000</td>
<td>$1,700,000</td>
<td>$1,700,000</td>
<td>$1,700,000</td>
<td>$1,700,000</td>
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<td><strong>TOTAL ASSETS</strong></td>
<td>$1,700,000</td>
<td>$2,700,000</td>
<td>$2,475,168</td>
<td>$2,247,456</td>
<td>$1,828,533</td>
<td>$1,590,645</td>
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<tr>
<td><strong>COMMITMENTS</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Salary Commitments</td>
<td>$420,806</td>
<td>$323,515</td>
<td>$290,170</td>
<td>$298,876</td>
<td>$307,842</td>
<td>$317,077</td>
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<tr>
<td>College Software Portfolio **</td>
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<td><strong>BALANCE AFTER COMMITMENTS, AVAILABLE FOR PROPOSALS</strong></td>
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<tr>
<td><strong>FUNDED PROPOSALS</strong></td>
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<td><strong>BALANCE</strong></td>
<td></td>
<td></td>
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<tr>
<td>Budgetted Balance</td>
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<td>$547,456</td>
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</tbody>
</table>

* Fee income should increase due to the increase in student base in ABE (inclusion of IED TECH)

** Software portfolio will increase as software costs are shifted from dept to college

*** Printing costs, lab monitor and supplies are shifted from dept to college-level, starting FY2008

**** Money held in reserve to handle projected spending in future years
### SALARY COMMITMENTS

<table>
<thead>
<tr>
<th>STAFF</th>
<th>2006</th>
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<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<td>Alan Kuuttila (ABE)</td>
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<td>$7,699</td>
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<td>Don Schlagel (CBE)</td>
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<td>David Schoeller (CCEE) *</td>
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<td>Grant Stephenson (CCEE) **</td>
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<td>Steve Spencer (ECSS)***</td>
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<td>Steven Kovarik (ECPE)</td>
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<td>Imad Abbadi (ECPE)</td>
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<td>Joe Mesterhazy (ECPE)**</td>
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<td>Steve Nystrom (ECPE)***</td>
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<td>Josh Kiesel (MSE)</td>
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<td>Robert Steed (ME)</td>
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<td>** TOTALS **</td>
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<td>$290,170</td>
<td>$298,876</td>
<td>$307,842</td>
<td>$317,077</td>
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</tbody>
</table>

* Discontinued IT role

** Resigned, no longer employed at ISU

*** Filled open position

Assume an average 3% salary increase per year
## COLLEGE SOFTWARE PORTFOLIO

<table>
<thead>
<tr>
<th>APPLICATIONS</th>
<th>2006</th>
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<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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</thead>
<tbody>
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<td>Ansys</td>
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<td>AutoDesk</td>
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<td>CrossOverOffice</td>
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<td>UGS Suite</td>
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<td>Fluent</td>
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<td>Pro/Engineer + Pro/Mechanica</td>
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<td>RedHat Enterprise Linix</td>
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<td>Tecplot</td>
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<td>$7,500</td>
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<tr>
<td>WinEDT (free)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td>X-Win32</td>
<td>$1,050</td>
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<td>$1,050</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td><strong>$69,351</strong></td>
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<td><strong>$100,047</strong></td>
<td><strong>$100,047</strong></td>
<td><strong>$110,047</strong></td>
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</table>
Operating Expense: Summary of Recommendations

<table>
<thead>
<tr>
<th>Department</th>
<th>Expendables</th>
<th>Maintenance</th>
<th>Infrastructure</th>
<th>Staffing</th>
<th>Total</th>
<th>eCRT</th>
<th>EFTF</th>
<th>Approved</th>
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</thead>
<tbody>
<tr>
<td>AERE</td>
<td>$3,000</td>
<td>$6,640</td>
<td>$9,300</td>
<td>$49,600</td>
<td>$68,540</td>
<td>$68,190</td>
<td>$68,190</td>
<td>$68,190</td>
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<tr>
<td>ABE</td>
<td>$1,500</td>
<td>$2,500</td>
<td>$4,680</td>
<td>$16,940</td>
<td>$25,620</td>
<td>$19,120</td>
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<td>$19,120</td>
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<tr>
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<td>$200</td>
<td>$3,000</td>
<td>$5,320</td>
<td>$0</td>
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<td>$10,020</td>
<td>$10,020</td>
<td>$10,020</td>
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<tr>
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<td>$0</td>
<td>$11,580</td>
<td>$17,100</td>
<td>$77,080</td>
<td>$105,760</td>
<td>$80,280</td>
<td>$103,160</td>
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<tr>
<td>IMSE</td>
<td>$1,500</td>
<td>$10,800</td>
<td>$4,900</td>
<td>$35,135</td>
<td>$52,335</td>
<td>$50,035</td>
<td>$80,170</td>
<td>$19,900</td>
</tr>
<tr>
<td>MSE</td>
<td>$100</td>
<td>$2,000</td>
<td>$4,500</td>
<td>$0</td>
<td>$6,600</td>
<td>$8,100</td>
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<td>ME</td>
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<td>$54,270</td>
<td>$59,370</td>
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<tr>
<td>ECSS</td>
<td>$2,300</td>
<td>$3,700</td>
<td>$4,560</td>
<td>$65,000</td>
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<td>$71,460</td>
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<td>UNDEFINED</td>
<td>$10,000</td>
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<td>$35,000</td>
<td>$0</td>
<td>$35,000</td>
<td>$35,000</td>
<td>$35,000</td>
</tr>
</tbody>
</table>

EFTF Committee

Panel Recommendation:
Loren Zachary, Assistant Dean (to be completed)

eCRT Review Panel

Panel Recommendation:
Chris McCoy, Director of Computing, ECSS

The multi-year plan estimated that departmental operating expenses for FY2008 would be $500,000. The eCRT panel is recommending funding of $368,375 for FY2008, while rolling approximately $40,000 into the college operating expense pool.

The following issues require further scrutiny by EFTF:

1. Student “technicians” and “TA’s” were considered inappropriate since “technicians” generally support general engineering equipment (non-computer) and TA’s provide course support. Funding TA’s would encourage every department to request funding for any class and can use an ever-increasing amount of funds.
2. “Toying with Technology” is a misfit within EFTF. While no one argues the course is valuable, everyone agrees that EFTF is not the place to fund it. Furthermore, the request for “general” funding (when every other request provides specific funding items) seems inappropriate – expects less accountability than others.
3. Monitoring cameras. Requests are proliferating and generating increasing cost burdens for the college without a clear college-wide plan for use and benefit. At issue is whether general-purpose cameras are appropriate under EFTF, even when those cameras are not used for security, but for general monitoring.
4. Discretionary software. There has been no mechanism to quickly fulfill needs for instructors to obtain low-cost, short-notice software. Each department now includes a proposed allowance to meet this need.
5. Student support staff. There is still no solution for college-wide coordination. Each department has varying needs and uses student employees differently to support computing.

Additional Comments

Additional comments for Operating Expense Proposals can be found in the eCRT, EFTF and Dean’s meeting minutes (Appendices attached).
Proposer: AERE  
Status: Approved (conditions as outlined below)  
Requested Funding: $68,540  
Total Awarded: $68,190

## EXPENDABLES

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaners, media, towels, vacuum bags, cables, HDs</td>
<td>$3,000</td>
</tr>
</tbody>
</table>

## MAINTENANCE

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>95 Durham rack rental space</td>
<td>$3000</td>
</tr>
<tr>
<td>Compaq server</td>
<td>$440</td>
</tr>
<tr>
<td>Printer repair</td>
<td>$1000</td>
</tr>
<tr>
<td>Project bulbs</td>
<td>$600</td>
</tr>
<tr>
<td>Replace old cameras</td>
<td>$1600</td>
</tr>
</tbody>
</table>

## INFRASTRUCTURE

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecom</td>
<td>$4,000</td>
</tr>
<tr>
<td>Books</td>
<td>$1000</td>
</tr>
<tr>
<td>Insurance</td>
<td>$3,500</td>
</tr>
<tr>
<td>Locknetics Lock for Howe 2202</td>
<td>$800</td>
</tr>
</tbody>
</table>

## STAFFING

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT training</td>
<td>$2,000</td>
</tr>
<tr>
<td>1/2 time TA to staff helpdesk</td>
<td>$14,000</td>
</tr>
<tr>
<td>1 Sr. Student System Admin = 13440</td>
<td>$20 hr/wk for 32 wks and 40 hrs/wk for 20 wks @ $12. This is a student that we rely on heavily to take the burden of daily lab and computer builds, software MSI builds, help with student issues. This person normally is given tasks and goes and does them with little supervision. Normally a 2nd year student. They also help with Jr. systems admins.</td>
</tr>
<tr>
<td>2 Jr. Student System Admins = 20160</td>
<td>$900</td>
</tr>
<tr>
<td>20 hr/wk for 32 wks and 40 hrs/wk for 20 wks @ $9. These students are normally students in their first year. They require more supervision. They are given repetitive tasks but are in training to do more both by Sr sys admin and Full time sys admins. They normally do software installs and computer rebuilds, Heavy lifting, take out trash and unbox computers.</td>
<td></td>
</tr>
</tbody>
</table>

## TOTAL PROPOSED

<table>
<thead>
<tr>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$68,540</td>
</tr>
</tbody>
</table>

## TOTAL AWARDED

<table>
<thead>
<tr>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$68,190</td>
</tr>
</tbody>
</table>

### Conditions:

Move camera expense to a collaborated capital project ($1600 decrease); Reduce professional development to college standard, $1750 ($250 decrease); Add discretionary software ($1500 increase)
AERE: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: 68190

**Restrictions:**
- Move camera expense ($1,600); include with college-wide Capital Project
- Reduce professional development to $1750; standard amount across all departments (reduce line by $250)
- Add Discretionary Software ($1,500)

**Reviewer: John Dickerson**

**Expendables**
Are we doing hard drives as expendables now? Are these drives that aren't covered by warranty? (Yes – JW)

**Maintenance**
Durham rack - isn't this a capital purchase? Or are you talking about Durham datacenter rental? (Yes. This is a recurring rental cost. – JW)

**Infrastructure**
IT training - please clarify what this is for, and it should be listed under staff anyways. (I have serious reservations about having students pay for IT training of staff, unless it's for a particular piece of software or technology required by a course)

Training opportunties have in the past have been made available to IT staff. The exact opportunities are difficult to predict. Examples may include Vista training, RHEL training, and application training. - JW

**Staffing**
Have we considered ways that these helpdesk functions can encompass multiple departments? What "materials" are they developing? Are these materials of value to other departments? (I hope that HEAT can help us share solutions to application support questions in the college. – JW. I plan to make application help materials available to the college. – JW.)

I'd sure like to see more coordination of student help across the college. (So would I. This item will identify and train a student capable of meeting this need. The last application specialist the college had was laid off. We are overdue to redevelope this resource. – JW)

**Reviewer: Don Schlagel**

**Staffing**
Wasn't the helpdesk in ME suposed to cover the South Zone needs for helping students in labs? Why do we need another one? ECSS has their office in Hoover, the "main" help desk in Black, why is another desk needed? (The TA position is to meet a need requested by students for access to support people who are familiar with the engineering applications AerE students are using. Existing support staff in ECSS and ME are not able to answer application specific questions. – JW)

**Reviewer: Hap Steed**

**Expendables**
Cleaning supplies seem high at $3000. (Not including labs scheduled for replacement, AerE has over 50 HDs in EFTF supported areas that are over 4 yrs old. If we just consider potential HD replacements 50x$50=$2,500. Other expendables are to support the many EFTF supported labs in AerE not visited by the north lab monitors. – JW)

**Maintenance**
Is the 95 Durham rack rent?
**Infrastructure**

Is this ethernet jacks, phone, switch rental?

**Staffing**

Help desk? With 4 on staff (Jim and three students) is a help desk necessary?

Reviewer: Josh Klesel

**Staffing**

3.5 students for 4 labs? I am not sure why there is a need for someone to enter tickets into HEAT when you are already sending everything to ITS anyway.

Reviewer: Chris McCoy

**Expendables**

1. Telecom is "infrastructure".
2. Insurance was considered to be "infrastructure"

**Maintenance**

1. Unclear what "cameras" represents. Acquisition of "equipment" should be part of a programmed capital project.

**Infrastructure**

1. IT Training is "staffing".

**Staffing**

1. Are TA responsibilities consistent with EFTF guidelines?

Reviewer: Steven Kovarik

**Expendables**

Insurance and telecom is infrastructure

**Maintenance**

Compac Server is the maint agreement? (Yes. This is a remote access system aeem2.iastate.edu – JW)

I assume cameras are for the security of the lab? (Yes. – JW)

**Infrastructure**

training and books should be staffing

**Staffing**

I didnt think we were funding TA positions with EFTF.

Reviewer: Alan Kuutilla

**Expendables**

$3000 seems a little high for cleaning supplies.

**Maintenance**

Should the rack be in a capitol project proposal?

**Infrastructure**

seems like a lot for books and training.

**Staffing**

Do you really need 3 people to unbox and rebuild computers for the whole year? (My support staff do much more than unbox and rebuild computers. – JW)
Proposer: ABE  
Status: Approved (conditions as outlined below)  
Requested Funding: $25,620  
Total Awarded: $19,120

**EXPENDABLES**  
$1,500  
- DVD RW, tapes, Books, etc.  
- HDD for Toshiba Tablet.  
- External USB HDD

**MAINTENANCE**  
$2,500  
- Estimate for hardware replacements  
- $1,500 for 5 lab printers maintenance

**INFRASTRUCTURE**  
$4,680  
- Communication Charges $960  
- Risk Management (Ins.) $820  
- Staff Professional Development $1000  
- 4 1GB Switches (Labs) $1600  
- Ethernet Cabling $300

**STAFFING**  
$16,940  
- Student Lab Assistant $3500: approx 10 hrs/wk to assist SSS in ABE  
- 1/2 of halftime grad assist. (in I ED II) $5440  
- Assistant that works 20 hrs/wk in an office in I ED II to assist users and students in the I ED II building and also the NSRIC building  
- Sysyem Support Specialist $8000

**TOTAL PROPOSED**  
$25,620

**TOTAL AWARDED**  
$19,120

**Conditions:**  
System Support Specialist line is covered in the College Salary commitments, Remove ($8,000 decrease); For definition purposes, TA should be named “Jr. Systems Administrator”; Add discretionary software ($1500 increase)
ABE: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $19,120

Restrictions:
- Remove System Support Specialist line; covered in college salary commitment ($8,000)
- For definition purposes, TA should be named "Jr. Systems Administrator"
- Add Discretionary Software ($1,500)

**Reviewer: Josh Klesel**

*Expendables*
Seems a little high...maybe put these items in maintenance?

*Infrastructure*
new hardware purchases shouldn't be here?

*Staffing*
full time staff should not be included here.

**Reviewer: Hap Steed**

*Staffing*
System Support should be off the top. What is SSS Is the grad assistant really a student computer helper? If so ok.

**Reviewer: John Dickerson**

*Infrastructure*
Staff development should be moved under staffing (though I really have a problem with spending student money to train staff, unless it's specific training for software needed by a class. General IT training seems like it should be a departmental expense).

*Staffing*
Aren't the lab assistants going to be shared across the North Zone?

**Reviewer: Steven Kovarik**

*Staffing*
Lab monitors pay should be consolidated with Central monitor staff. Grad assistants should be covered by departments. Looks like Student lab assistant is a support to System Support Specialist. Is this correct? Systems Support Specialist $8000 is this salary? Explain.

**Reviewer: Jim Wellman**

*Staffing*
System Support Spec costs should be off the top.

**Reviewer: Don Schlagell**

*Staffing*
I thought staff salaries were "off the top" right now. Also, the grad assistants and TA's, etc. should be rolled together for the North Zone, I thought.
Reviewer: Chris McCoy

**Maintenance**
Acceptable. Assume that "replacements" does not mean purchase of equipment such as printers, computers, etc.

**Infrastructure**
1. Professional development should be part of "staffing".
2. Though the cost of switches and cabling is low, these should not be part of "operating expense". They probably need to be included in the appropriate lab upgrade capital project.

**Staffing**
1. P&S salaries ($8500) will be maintained in college-level commitments as noted in the instructions. This amount should be deducted from approved amount in order to balance budgets.
2. Duties and responsibilities of the TA need to be explained. If this is for TA work, then this would be inappropriate. If this is for IT support, then a brief explanation of services provided should be included.
3. Lab monitor/assistant should be included in "north zone" lab monitor expenses and coordinated through Steven Kovarik for "north zone" coverage.
Proposer: CBE  
Status: Approved (conditions as outlined below)  
Requested Funding: $ 5,400  
Total Awarded: $6,900

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<th>Category</th>
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</thead>
<tbody>
<tr>
<td>EXPENDABLES</td>
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<tr>
<td>DVD-R, CD-R, Cleaning Supplies</td>
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</tr>
<tr>
<td>MAINTENANCE</td>
<td>$ 2,300</td>
</tr>
<tr>
<td>Printer Cleaning -- 1000</td>
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</tr>
<tr>
<td>Dell WPD -- 200</td>
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<tr>
<td>Insurance -- 600</td>
<td></td>
</tr>
<tr>
<td>Unplanned Hardware Failure Replacement -- 500</td>
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</tr>
<tr>
<td>INFRASTRUCTURE</td>
<td>$ 1,200</td>
</tr>
<tr>
<td>Telecomm</td>
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</tr>
<tr>
<td>STAFFING</td>
<td>$ 1,750</td>
</tr>
<tr>
<td>Training, magazines, manuals, conference fees</td>
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</tr>
<tr>
<td>TOTAL PROPOSED</td>
<td>$ 5,400</td>
</tr>
<tr>
<td>TOTAL AWARDED</td>
<td>$6,900</td>
</tr>
</tbody>
</table>

**Conditions:**  
Add discretionary software ($1500 increase)
CBE: eCRT Review Panel Comments

*eCRT Panel Summary:
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $6,900

Restrictions:

1. Add Discretionary Software ($1,500)

Reviewer: Steven Kovarik

Maintenance
Move insurance to Infra.

Reviewer: Chris McCoy

Maintenance
1. Insurance was considered to be "Infrastructure".

Reviewer: John Dickerson

Staffing
What conference attendance is planned? I have serious concerns about using student fees for attending conferences.
Proposer: CCEE  
Status: Approved (conditions as outlined below)  
Requested Funding: $ 8,520  
Total Awarded: $10,020

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPENDABLES</td>
<td>$ 200</td>
<td>CDR's, cleaning supplies, other general expendibles.</td>
</tr>
<tr>
<td>MAINTENANCE</td>
<td>$ 3,000</td>
<td>General hardware maintenance/repair: replace hard drives, memory, and other computer replacements for out of warranty machines. Replacement bulbs if needed.</td>
</tr>
<tr>
<td>INFRASTRUCTURE</td>
<td>$ 5,320</td>
<td>Networking - $3,570, Insurance - $1,750</td>
</tr>
<tr>
<td>STAFFING</td>
<td>$ 0</td>
<td>NA</td>
</tr>
</tbody>
</table>

**TOTAL PROPOSED**  
$ 8,520

**TOTAL AWARDED**  
$10,020

*Conditions:*  
Add discretionary software ($1500 increase)
CCEE: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now  
Funding Recommendation: $10,020

Restrictions:

- Add Discretionary Software ($1,500)

**Reviewer: Chris McCoy**

*Infrastructure*  
Acceptable. Assume same level of judgement as exercised in FY2007.

**Reviewer: Alan Kuutilla**

*Infrastructure*  
Can you explain “Networking”?
Proposer: ECPE
Status: Approved (conditions as outlined below)
Requested Funding: $105,760
Total Awarded: $80,280

<table>
<thead>
<tr>
<th>EXPENDABLES</th>
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</thead>
<tbody>
<tr>
<td>MAINTENANCE</td>
<td>$11,580</td>
</tr>
<tr>
<td>- Dell Certification = $170</td>
<td></td>
</tr>
<tr>
<td>- 15 printer maintenance kits = $2550 only if needed</td>
<td></td>
</tr>
<tr>
<td>- 50 backup tapes = $3000 purchased when needed</td>
<td></td>
</tr>
<tr>
<td>- 5 projector bulbs = $3000 purchased when needed not stock</td>
<td></td>
</tr>
<tr>
<td>- Cables = $1000</td>
<td></td>
</tr>
<tr>
<td>- 10 hard drives = $1500 only if needed</td>
<td></td>
</tr>
<tr>
<td>- 4X50 DVD's = $215 For software, student data</td>
<td></td>
</tr>
<tr>
<td>- 4X50 CDR's = $145</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>INFRASTRUCTURE</th>
<th>$17,100</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Network Jacks (42@ $20) = $10000</td>
<td></td>
</tr>
<tr>
<td>- Security cameras = $2500</td>
<td></td>
</tr>
<tr>
<td>- 2 Senior Systems administrator computer Upgrades = $4600</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STAFFING</th>
<th>$77,080</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Student Technicians = 22,880. 40hr/wk for 52 wks @ $11/hr. Technicians are responsible for all hardware such as Oscopes, Function Generators, multimeters, Waveform generators, hardware cableing and all cableing associated with labs allowing students to do their experiments. This student is also responsible for repairs to hardware and printers including yearly maint.</td>
<td></td>
</tr>
<tr>
<td>- 1 Sr. Student System Admin = 13,440. 20 hr/wk for 32 wks and 40 hrs/wk for 20 wks @ $12. This is a student that we rely on heavily to take the burden of daily lab and computer builds, software MSI builds, help with student issues. This person normally is given tasks and goes and does them with little supervision. Normally a 2nd year student. They also help with Jr. systems admins.</td>
<td></td>
</tr>
<tr>
<td>- 2 Jr. Student System Admins = 20,160. 20 hr/wk for 32 wks and 40 hrs/wk for 20 wks @ $9. These students are normally students in their first year. They require more supervision. They are given repetitive tasks but are in training to do more both by Sr sys admin and Full time sys admins. They normally do software installs and computer rebuilds, Heavy lifting, take out trash and unbox computers.</td>
<td></td>
</tr>
<tr>
<td>- Matlab help desk (2 semesters of work) = 13,600. This is normally a Grad student that has experience in using Matlab and works to help under graduate students with questions and problems that they would be facing in classes that require matlab.</td>
<td></td>
</tr>
<tr>
<td>- Training, books, magazines, conferences and certification for 4 staff at $1750 per year 7,000</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL PROPOSED | $105,760 |

TOTAL AWARDED | $80,280 |

Conditions:
Move camera expense to a collaborated capital project ($2500 decrease); Reduce staff computers to college standard, $3000 ($1600 decrease); Remove student Technicians ($22,880 decrease); Add discretionary software ($1500 increase)
ECPE: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $80,280

Restrictions:
- Move camera expense ($2,500); include with college-wide Capital Project
- Reduce staff computers to $3000 (reduce line by $1,600)
- Remove student Technicians ($22,880) - inappropriate by CAC guidelines
- Add Discretionary Software ($1,500)

*Reviewer: Chris McCoy*

**Infrastructure**
1. Security cameras should be part of a Capital Project.
2. Computer upgrades not appropriate for Operating Expense. Should be part of equipment purchase in a Capital Project.

**Staffing**
1. Student technicians seems to be inappropriate according to EFTF as these are general electronic technicians and not computer-support technicians. I would suggest reduced, shared or partial funding for these positions.
2. Can the Matlab helpdesk be coordinated with ITS to reduce the cost of the college-wide expenses (what ITS wants to charge for "supporting" Matlab)?

*Reviewer: Hap Steed*

**Infrastructure**
A lot of departments are buying cameras. Can we get bulk purchase? The Axia 210 is only $600 each. What model cost 1250?

**Staffing**
Student technicians should not be funded. Outside the intent of EFTF Other departments fund this type of help through their departments. With the size of the department - 4 full time staff and 3 student system administrators?? A bit heavy on help. Need to cut back. Matlab help desk? How many hours. Will a log be kept to see how much this person is really needed?

*Reviewer: Steven Kovarik*

**Infrastructure**
Discussion on Cameras and recording software needed. Discussion on full time administrators computers needed.

**Staffing**
Technicians are utilized for lab environment to maintain equipment needed for labs that are not computer related but still a functional part of the lab environment. These Techs also repair and maintain printers, cabling etc associated with appropriate functionality of lab environment.

Note that this past year that we only employed 1 senior systems admin and 1 jr sys admin. Overall we spent much less then requested but left room if needed. We are expecting to have a large amount of movement of rooms due to construction. Partially paid for with Departmental funds and partially with EFTF as majority is lab or computing related.

Matlab help desk has become hard to fill with appropriate personnel that have the knowledge to help with students issues and normally ends up being a Grad students or TA. May not be appropriate here and should be reviewed overall.
Reviewer: John Dickerson

Expendables
many of the items under Maintenance (DVDs, CDs, tapes, printer maint. kits) should more appropriately be listed here as expendables.

Staffing
We should look for ways to better coordinate the activities of the student admins to ensure consistency of knowledge across the college.

What are the duties of the technicians? Are they doing maintenance/repair on the equipment or acting as lab TAs? If acting as essentially lab TAs, I don’t think this should be EFTF funded. It seems to me that students already pay for instructors and TAs via their class fees. What’s the policy for funding non-computer technicians via EFTF?

Is the Matlab expert available as a resource for all students in the college? I think the idea of a dedicated helpdesk for an application is a good thing and could benefit the entire college. What are the duties/expectations of this position?

Reviewer: Josh Klesel

Infrastructure
It seems you budgeting for 20, 1GB lines...is this something the college should be doing in the labs? I’m not sure how appropriate these are: Security cameras = $2500; 2 Senior Systems administrator computer Upgrades = $4600

Staffing
Is the Matlab help desk still a justified expenditure? If so, should this be built out in other areas?

Reviewer: Don Schlagell

Staffing
Why are there electronic technicians being funded by EFTF? This doesn't seem appropriate and should maybe be funded in another manner.
Proposer: IMSE  
Status: Approved (conditions as outlined below)  
Requested Funding: $52,335  
Total Awarded: $19,900

### EXPENDABLES

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office supplies .5k, Storage media 1k</td>
<td>$1,500</td>
</tr>
</tbody>
</table>

### MAINTENANCE

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive shield software 2k, Printers 1k, Hard drives 2k, replacement monitors 2k, Repair 1.5k, special purpose software 1.8k, memory .5k</td>
<td>$10,800</td>
</tr>
</tbody>
</table>

### INFRASTRUCTURE

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone .5k, Telecommunications 1.9k, Insurance 2k, Cables .5k</td>
<td>$4,900</td>
</tr>
</tbody>
</table>

### STAFFING

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>5k for Hourly undergrad to help maintain the labs</td>
<td>$35,135</td>
</tr>
<tr>
<td>30135 for 2 graduate students to support the learning portal used in 3 required undergraduate courses. The learning portal provides students with a realistic enterprise IT experience and also facilitates an international experience in which ISU students interact with students from international universities in a common student team.</td>
<td>$35,135</td>
</tr>
</tbody>
</table>

### TOTAL PROPOSED

<table>
<thead>
<tr>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>$52,335</td>
</tr>
</tbody>
</table>

### TOTAL AWARDED

<table>
<thead>
<tr>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>$19,900</td>
</tr>
</tbody>
</table>

**Conditions:**  
Remove Drive Shield software, no longer needed by department ($2000 decrease); Reduce discretionary software to college standard, $1500 ($300 decrease); Remove TA ($30,135 decrease)
IMSE: eCRT Review Panel Comments

*eCRT Panel Summary:
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: 50035

Restrictions:
- Remove Drive shield software; Dept. no longer needs ($2,000)
- Reduce Special Purpose Software (Discretionary Software) to $1,500 (reduce line by $300)
- EFTF committee should address appropriateness of TA’s; eCRT is unclear if this is appropriate. The number requested is one more than last year.

*Reviewer: Don Schlagell

**Maintenance**
Why Driveshield?

**Staffing**
I didn’t think TA’s were authorized for coverage under EFTF. I think this might not be appropriate for these funds.

*Reviewer: Hap Steed

**Maintenance**
Should special purpose software be in software?

**Staffing**
There need to be a discussion with the entire group on computer support using grad students. We need to come up with a consistent across the board plan.

*Reviewer: Chris McCoy

**Maintenance**
1. Software should not be included in Operating Expense. Needs to be moved to "Software Portfolio" and clearly described. $3,800.

**Staffing**
1. Graduate assistants seems to be inappropriate according to EFTF guidelines. $30,135

*Reviewer: John Dickerson

**Maintenance**
There are several software expenses listed here. What are they?

**Staffing**
Are the learning portal support positions really just TAs for the courses? TAs shouldn't be funded by EFTF. I have concerns about funding this under EFTF.

*Reviewer: Josh Klesel

**Maintenance**
This seems high. 2k for Driveshield? How many hard drives a year do you replace? Almost 2k on "special purpose software" seems too vague.

**Staffing**
Seems high for maintaining this portal. If this something that other departments could use?
Reviewer: Jim Wellman

Maintenance
Move Driveshield to SW request

Reviewer: Steven Kovarik

Maintenance
Move software to software expenses. What is special purpose software?

Staffing
Grad students should be departmentally supported and not on EFTF.
Proposer: MSE  
Status: Approved (conditions as outlined below)  
Requested Funding: $ 6,600  
Total Awarded: $8,100

<table>
<thead>
<tr>
<th>EXPENDABLES</th>
<th>$ 100</th>
</tr>
</thead>
</table>
| CDR's, cleaning supplies, other general low cost expendibles.

<table>
<thead>
<tr>
<th>MAINTENANCE</th>
<th>$ 2,000</th>
</tr>
</thead>
</table>
| General hardware maintenance/repair: replace hard drives, memory, and other computer replacements for out of warranty machines. Replacement bulbs if needed.

<table>
<thead>
<tr>
<th>INFRASTRUCTURE</th>
<th>$ 4,500</th>
</tr>
</thead>
</table>
| Network and telephone service - $3,500  
General Risk insurance - $1,000

<table>
<thead>
<tr>
<th>STAFFING</th>
<th>$0</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>TOTAL PROPOSED</th>
<th>$ 6,600</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TOTAL AWARDED</th>
<th>$8,100</th>
</tr>
</thead>
</table>

**Conditions:**  
Add discretionary software ($1500 increase)
MSE: eCRT Review Panel Comments

*eCRT Panel Summary:
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: 8100

Restrictions:
- Add Discretionary Software ($1,500)
ME | FY08
---|---

Proposer: ME  
Status: Approved (conditions as outlined below)  
Requested Funding: $67,270  
Total Awarded: $54,270

### EXPENDABLES

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning supplies, markers, erasers, binders, cd blanks and cases, backup tapes, etc.</td>
<td>$1,000</td>
</tr>
</tbody>
</table>

### MAINTENANCE

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printer maintenance as performed by Durham on 19 printers (as needed)</td>
<td>$3,000</td>
</tr>
<tr>
<td>Yearly Insurance Premium</td>
<td>$2,500</td>
</tr>
<tr>
<td>Misc: hard drives, cables, usb flash drives, hubs</td>
<td>$3,000</td>
</tr>
<tr>
<td>Replacement of 3 old security cameras</td>
<td>$1,500</td>
</tr>
<tr>
<td>15 backup tapes</td>
<td>$750</td>
</tr>
</tbody>
</table>

### INFRASTRUCTURE

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecom – switches – internet – phone</td>
<td>$7,000</td>
</tr>
<tr>
<td>3-security locknetics lock 1051, 0095d Black, 2070</td>
<td>$2,400</td>
</tr>
<tr>
<td>4-wireless hubs for Black</td>
<td>$280</td>
</tr>
<tr>
<td>Replace Senior System Admin Computer System – out of warranty</td>
<td>$2,300</td>
</tr>
<tr>
<td>Security camera for 2070 Black Labs</td>
<td>$600</td>
</tr>
<tr>
<td>Computer for recording security camera images</td>
<td>$1,500</td>
</tr>
</tbody>
</table>

### STAFFING

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME/IMSE media room monitors 7:30-5:30 daily, 45 hrs week x 34 weeks @ $10.00</td>
<td>$15,300</td>
</tr>
<tr>
<td>Junior System administrator. 20 hrs x 46 weeks @ $12.00</td>
<td>$11,040</td>
</tr>
<tr>
<td>Student Technician – computer lab set up and assistant. Heat transfer, fluids, instrumentation, engine lab. 15 hr week x 34 weeks @ $10</td>
<td>$5,100</td>
</tr>
<tr>
<td>Student support promoting CAD/CAM, data acquisition systems through outreach by SAE. Targeting schools in major population centers such as Des Moines, Davenport, and Dubuque where the SAE students can make contact with under-represented minorities to help increase the chances of improving diversity recruitment at ISU- $5,000</td>
<td></td>
</tr>
<tr>
<td>Technical Training. 5 ME technical personnel. Classes, tech manuals, trade shows</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

### TOTAL PROPOSED

$67,270

### TOTAL AWARDED

$54,270

**Conditions**  
Move camera and related computer expense to a collaborated capital project ($3,600 decrease); Reduce staff workstation replacement to college standard, $1,500 ($800 decrease); Remove student technician ($5,100 decrease); Remove SAE outreach ($5,000 decrease); Add discretionary software ($1,500 increase)
ME: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $54,270

Restrictions:
- Move cameras and related computer expens ($3,600); include with college-wide capital project
- Reduce staff workstation replacement to $1500 (reduce line by $800)
- Remove student Technician ($5,100); inappropriate by CAC guidelines
- Eliminate SAE outreach ($5,000); inappropriate
- Add Discretionary Software ($1,500)

**Reviewer: Steven Kovarik**

**Maintenance**
Discussion on overall camera strategy and recording needs to be discussed.

**Infrastructure**
Computers for full time systems admins needs to be discussed as to where they are appropriately located. Either here or Capital but needs to be consistent and agreed upon.

**Staffing**
Review of Technicians in the lab environment is needed across the board. Functionality of the equipment is needed to make sure labs function appropriately. Labs may consist of more then just computers but are needed to do labs none the less. More discussion needed on this front. SAE seems inappropriate funding use.

**Reviewer: John Dickerson**

**Maintenance**
The cameras and computer for recording security images should be listed as a capital project.

**Infrastructure**
Replacement of system administration workstation should be listed as a capital project.

**Staffing**
I think there should be greater coordination across the college concerning how we use student IT admin assistants. There is likely to be considerable overlap in skills and types of tasks performed. If nothing else, cross-pollenization of ideas and information could occur. It may even be possible to provide better coverage of assistants where they were needed if there was better coordination and sharing among departments.

**Reviewer: Hap Steed**

**Maintenance**
Can the college buy security cameras in bulk? This may save money.

**Infrastructure**
Security camera - see above comment.

**Staffing**
Student technicians - If not completely computer related activities - should not be funded. Outreach By SAE - Is this appropriate for EFTF funding?

**Reviewer: Don Schlagell**

**Staffing**
I don't see how supporting an SAE outreach program is an appropriate use of EFTF funds.
**Reviewer: Chris McCoy**

**Maintenance**
1. Cameras should be part of a Capital Project. Given that several departments are requesting cameras of this type, it seems that the college needs to combine resources and develop a common capital project for security camera systems, including camera and software (see software requests).

**Infrastructure**
1. Acquisition of new computers is not appropriate for operating expense. This should be part of a capital project.
2. Another camera ... see note above.
3. Computer (see note above). A new computer is not necessary. Repurpose an existing used computer and save the $1500.

**Staffing**
3. Student technician seems to be inappropriate. Could this position be shared funded with department?
4. SAE outreach seems inappropriate. This is an outreach activity and not an EFTF opportunity.
5. ME has 2 FTE. How is the 5 counted? In general, training has been for full-time staff @ $1750/staff.

**Reviewer: Josh Klesel**

**Staffing**
What Chris said: 1. Student technician seems to be inappropriate. Could this position be shared funded with department? 2. SAE outreach seems inappropriate. This is an outreach activity and not an EFTF opportunity. 3. ME has 2 FTE. How is the 5 counted? In general, training has been for full-time staff @ $1750/staff.
ECSS

Proposer: ECSS
Status: Approved (conditions as outlined below)
Requested Funding: $75,560
Total Awarded: $71,460

EXPENDABLES $2,300
- $2,300. Storage Media (backup tapes). 50 LT02 tapes @ $46/tape (as needed -- will not purchase if not needed)

MAINTENANCE $3,700
- $1,200. Printer maintenance kits (4 lab printers)
- $2,500. Projector maintenance (bulb replacement 5 projectors, $500/bulb, purchase on failure -- not stock)

INFRASTRUCTURE $4,560
- $2,800. Telecommunications (in labs)
- $1,200. Insurance
- $560. SSL Certificates for: mail.eng, webspace.eng, home.eng, print2.eng, gradplan.eng

STAFFING $65,000
ECSS relies heavily upon a good, core group of jr. system administrators (student hourly) to provide support in a wide range of responsibilities including system build, hardware repair, software (re)packaging, end-user assistance, etc. Also, ECSS places a high emphasis on training and development of these students in preparation for a career in IT.

6. $25,000. Jr. Unix System Admin. (2 Students approximately 18hrs/wk when class is in session and 35hrs/wk over summer/breaks; pay rate $10-12/hr).
   a. Direct coverage for labs in ECSS, AERE, ECPE, ME, and throughout college
   b. Test and development of advanced computing environment (grid, servers, desktops, NAS/SAN)
   c. Assist in management of core services such as jabber, email, backups, file storage, etc.
   d. Software packaging and distribution (engineering applications and other software)
   e. Setup and configuration of desktop systems
   f. End-user support

7. $40,000. Jr. Windows System Admin. (4 students approximately 18hrs/wk when class is in session and 35hrs/wk over summer/breaks; pay range between $8.50-10/hr)
   a. Direct coverage for labs in ECSS, MSE, CCEE, and throughout college
   b. Setup and configure Windows desktop systems
   c. Software packaging and distribution (engineering applications and other software)
   d. Troubleshoot and repair hardware (systems/printers)
   e. End-user support
   f. Lab monitor duties over summer in south zone (Black, Hoover, Howe) and Town EB

TOTAL PROPOSED $75,560

TOTAL AWARDED $71,460

Conditions
Modify Jr. System Admins to 15 hours/week ($5600 decrease); Add discretionary software ($1500)
**ECSS: eCRT Review Panel Comments**

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $71,460

Restrictions:

- Modify Jr. System Admins to 15 hrs/wk (reduce by $5,600)
- Add Discretionary Software ($1,500)

**Reviewer: Alan Kuutilla**

**Staffing**
Shouldn’t the other departments (MSE and CCEE) be paying for their support and not EFTF?

**Reviewer: Hap Steed**

**Staffing**
6 students @ $65,000 + all the full time staff?

**Reviewer: John Dickerson**

**Staffing**
I think we should look for ways to better coordinate the use of student IT admin assistants. There is likely a considerable amount of overlap in skills and type of tasks performed.
Proposer: UNDEFINED: Toying With Technology
Status: Approved (conditions as outlined below)
Requested Funding: $35,000
Total Awarded: $35,000

### EXPENDABLES

$10,000

Toying With Technology: Parts and supplies for robotic kits and experiments: The classes, both an undergraduate class for future teachers and a graduate class in the summer for current teachers, are done in hands-on, experimentation format. These parts and supplies are vital parts of the daily classroom activities.

### MAINTENANCE

$0

No maintenance is requested since the students maintain the equipment and their salaries are requested.

### INFRASTRUCTURE

$0

No infrastructure request is made since an external donor provided funds in the last year that purchased 20 new laptops and 20 desktops for the program. If this is a more desirable purchase for EFTF funds, a correction voucher can be used to purchase these computers on EFTF funds and the donated funds can be used for the requested funds.

### STAFFING

$25,000

Student salaries for undergraduates majoring in engineering (for their technical expertise) and education (for their pedagogical expertise) who work in the program: These students serve as teaching/lab assistants and lab monitors who maintain the network, hardware, and software. They also develop curriculum and help to supervise students in the classes.

### TOTAL PROPOSED

$35,000

### TOTAL AWARDED

$35,000

**Conditions**

Program is required to submit an itemized budget enumerating specific needs for review by eCRT and EFTF Committee; Account to be in coordination and managed by ECSS; Appropriate funding adjustments may be made upon completion of review of itemized budget; Program to be held to the same standard as other department operating proposals
**UNDEFINED: eCRT Review Panel Comments**

**eCRT Panel Summary:**
Proposal Priority Recommendation: Inappropriate:Fund Elsewhere
Funding Recommendation: $0

Restrictions:
- Inappropriate for CoE student computing fees

**Reviewer: Chris McCoy**

- **Expendables**
  See restrictions.

- **Maintenance**
  See restrictions.

- **Infrastructure**
  See restrictions.

- **Staffing**
  See restrictions.

**Reviewer: Hap Steed**

- **Expendables**
  Outside EFTF guidelines

- **Staffing**
  Outside EFTF guidelines. Should be supported by the college not EFTF

**Reviewer: John Dickerson**

- **Staffing**
  It's seems really inappropriate for Engineering fees to pay for TAs from another college.

**Reviewer: Josh Klesel**

- **Staffing**
  This program has a lot of value to the College and should be continued. However, it is not appropriate to ask the students of the college to pay for this, since they do not (with the exception of Mate E 316) receive any direct benefit from this program.

**Reviewer: Steven Kovarik**

- **Expendables**
  Not a student engineering class or project. Not appropriate.

- **Staffing**
  Not a student engineering class or project. Not appropriate.
# Software Portfolio: Summary of Recommendations

<table>
<thead>
<tr>
<th>Software Title</th>
<th>Proposed</th>
<th>eCRT</th>
<th>EFTF</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AERE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adobe Acrobat Pro</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Adobe Photoshop</td>
<td>50</td>
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<td>50</td>
</tr>
<tr>
<td>Altair</td>
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<tr>
<td>CATIA</td>
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<td>Diskeeper</td>
<td>600</td>
<td>600</td>
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<td>600</td>
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<td>Flight Simulator</td>
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<td>2,800</td>
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<td>Netcam Watcher Pro</td>
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<td><strong>AERE Subtotal</strong></td>
<td>12,150</td>
<td>10,950</td>
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<tr>
<td><strong>ABE</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ABE and ME Joint MatLAB Toolbox</td>
<td>3,250</td>
<td>3,250</td>
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<tr>
<td>LogixPro PLC Simulation Software</td>
<td>510</td>
<td>510</td>
<td>510</td>
<td>510</td>
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<tr>
<td>Matlab DAC Toolbox</td>
<td>3,000</td>
<td>3,000</td>
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<tr>
<td>Moldflow Plastics Advisor</td>
<td>2,500</td>
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<tr>
<td>Chemkin</td>
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<td><strong>CCEE</strong></td>
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<tr>
<td>Autoturn 5.x</td>
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<td>500</td>
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**EFTF Committee**

**Committee Recommendation:**
Loren Zachary, Assistant Dean

To be completed

**eCRT Review Panel**

**Panel Recommendation:**
Chris McCoy, Director of Computing

The multi-year plan estimated that departmental software portfolio proposals for FY2008 would be $200,000. The eCRT panel is recommending funding of no more than $185,059 (excluding Matlab for Students, described below) for FY2008.
The following issues require further scrutiny by EFTF:

1. Graduation Planner. The review panel believes that this is the cost of doing business and the college should bear the cost, not the students. If this is fundable, then so is virtually every other hardware/software component used in the college for administrative functions.

2. Monitoring camera software. As with the operating expense, there is considerable disagreement as to whether this is appropriate or not.

3. Matlab for Students. Of special note is a proposal to fund 50% of a campus Matlab (for Students) license in conjunction with a CAC proposal from the College of Engineering. This special request would add $25,000 to the recommended funding level for FY2008.

Additional Comments

Additional comments for Software Portfolio Proposals can be found in the eCRT and EFTF meeting minutes.
Proposer: Jim Wellman
Status: Approved (as outlined below)
Requested Funding: $12,150
Total Awarded: $10,950

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<td>ECRT RECOMMENDATION: Critical:Fund Now</td>
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| **Adobe Photoshop** | $50 | $50 |
| Description: Image editing software $50/24 mon |
| Recurring Costs: 25 |
| Courses: All |
| Scope of Use: College |
| License Size: 1 seat |
| Term: Annual Maintenance |
| ECRT RECOMMENDATION: Critical:Fund Now |

| **Altair** | $1,500 | $1,500 |
| Description: Optimization and Design |
| Recurring Costs: 1500 |
| Courses: Aer E 461, Aer E 462, AerE 421 |
| Scope of Use: University |
| License Size: University Unlimited |
| Term: Annual Maintenance |
| ECRT RECOMMENDATION: Critical:Fund Now |

| **CATIA** | $5,000 | $5,000 |
| Description: CAD |
| Recurring Costs: 5000 |
| Courses: ? |
| Scope of Use: College |
| License Size: 10 concurrent use |
| Term: Annual Maintenance |
| eCRT Panel Restrictions: |
| ECRT RECOMMENDATION: Important:Fund as Appropriate |

| **Diskeeper** | $600 | $600 |
| Description: Hard drive defragmenting software for 3 Windows 2003 servers. 2 terminal servers + 1 software distribution server |
| Recurring Costs: 100 |
| Courses: All |
| Scope of Use: Department(s) |
| License Size: 3 server licenses |
| Term: New |
| ECRT RECOMMENDATION: Opportune:Fund as Available |

| **Flight Simulator** | $2,800 | $2,800 |
Description: Simulates aircraft flight
Recurring Costs: 2800
Courses: AerE 290 - Private Pilot Theory, AerE 331 - Flight Control Systems, AerE 301 - Flight Experience
Scope of Use: Selected Systems
License Size: 61 systems located in Howe Hall
Term: New
eCRT Panel Restrictions: Condition: Review at end of year to justify the need and determine how software has enhanced student course work.
ECRT RECOMMENDATION: Opportune:Fund as Available

Netcam Watcher Pro

Description: Camera monitoring software
Recurring Costs: 1200
Courses: All
Scope of Use: Department(s)
License Size: single server, unlimited camera
Term: New
eCRT Panel Restrictions: Include software expense w/Capital Project
ECRT RECOMMENDATION: Inappropriate:Fund Elsewhere
Adobe Acrobat Pro

Submitted by: Steven Kovarik
Opportune: Fund as Available
While an important piece of software. I might be over kill for most of the functionality needed. Maybe a few license in key places would be better.

Submitted by: Chris McCoy
Opportune: Fund as Available
Given that Office can now generate PDF files, the continued use of this software becomes questionable. It’s probably still useful to support for one more year, but support in the future should be dependent upon some identified need.

Submitted by: Don Schlagell
Questionable: Fund Partially
Do we still need acrobat since Office 2007 will write PDF’s natively?

Submitted by: John Dickerson
Opportune: Fund as Available
How does the licensing on this work? Is this a floating license? If not, how does this work as a College-wide license? There are free tools for creating PDFs that can work in a pinch, so I would say this is not a critical purchase but a nice-to-have.

Submitted by: Hap Steed
Opportune: Fund as Available
We we going to try and get a lot of license for the entire college?

Submitted by: Jim Wellman
Opportune: Fund as Available
Well used and requested

Adobe Photoshop

Submitted by: John Dickerson
Opportune: Fund as Available
one seat?? you just need one seat? Is this installed on one machine? Is this a floating license? At $50, it’s hard to object.

Submitted by: Don Schlagell
Questionable: Fund Partially
How much use is one seat going to provide? Where?

Submitted by: Hap Steed
Opportune: Fund as Available
Seems reasonable. Each department should have a copy for students to use.

Submitted by: Josh Klesel
Important: Fund as Appropriate
Seems appropriate

Submitted by: Steven Kovarik
Opportune: Fund as Available
Not sure how you would utilize just one seat?
Submitted by: Chris McCoy
Questionable: Fund Partially
No explanation of how this software will be used.

**Altair**

Submitted by: Steven Kovarik
Important: Fund as Appropriate
Class purpose seems appropriate

Submitted by: Jim Wellman, Josh Klesel
Opportune: Fund as Available
Just beginning to see some use. Needs to be evaluated in ME

Submitted by: Hap Steed
Important: Fund as Appropriate
If needed for class, buy it.

Submitted by: John Dickerson
Important: Fund as Appropriate
This is pretty well-established name in the CAE field. Is there a list of what particular features license covers. It seems like a good tool to have available.

Submitted by: Chris McCoy
Important: Fund as Appropriate
This software was offered to ISU at a vastly discounted rate for a university-wide site license. Provided that it is still being used in coursework, support should be continued.

**CATIA**

Submitted by: Chris McCoy
Important: Fund as Appropriate
This request is lacking in specifics. I believe CATIA is important and relevant to departmental success, but there is little supporting information here.

Submitted by: Hap Steed
Important: Fund as Appropriate
Will this be a sight license for college?

Submitted by: Jim Wellman
Opportune: Fund as Available
Expensive. yet to be integrated into course material

Submitted by: Josh Klesel, Steven Kovarik
Important: Fund as Appropriate
Seems appropriate

Submitted by: John Dickerson
Important: Fund as Appropriate
Again, this a major name in the design and automation field. Considering that both Boeing and Airbus use CATIA as their primary CAD/PLM system, it seems like a good opportunity to give our students exposure to it at a reasonable cost.

**Diskeeper**

Submitted by: Steven Kovarik
Imprudent: Do Not Fund
not appropriate for labs.

Submitted by: Chris McCoy
Imprudent: Do Not Fund
Not sure how and why this is used. Some explanation would be nice.

Submitted by: Don Schlagel
Imprudent: Do Not Fund
Why not use the internal Windows Defragmenter?

Submitted by: John Dickerson
Imprudent: Do Not Fund
Use RHEL4. It works as a better Windows file server than Windows and it doesn't have all the dodgy disk fragmentation problems.

Submitted by: Hap Steed
Important: Fund as Appropriate
A very important tool for keeping servers running at the top of their game. It is the industry standard for Windows computers. Studies have shown improved performance by proper maintained systems.

Submitted by: Jim Wellman
Important: Fund as Appropriate
needed

Submitted by: Josh Klesel
Imprudent: Do Not Fund
If this is so great, why aren't others doing this? The built-in defragmenter can be scheduled to run nightly.

Flight Simulator

Submitted by: John Dickerson
Opportune: Fund as Available
I guess it's cheaper than buying a more expensive flight simulator tool and I've heard many reviewers say that for the price it's a pretty accurate representation of flying. This may not be as high a priority as other tools, but should be considered if funds allow it. IMO, just because some students may actually enjoy playing with it shouldn't be used against buying it.

Submitted by: Hap Steed
Important: Fund as Appropriate
If needed for class. Buy it. I prefer Pack-Man my self! Just a little humor!!

Submitted by: Josh Klesel
Questionable: Fund Partially
Why wasn't this purchased before the EFTF funding model change? Is there a way this could be gifted?

Submitted by: Jim Wellman
Opportune: Fund as Available
questionable. Thought it would be worth a one year trial to see if the benefits outweigh the risks. Attempts to have this software gifted have failed.

Submitted by: Chris McCoy
Opportune: Fund as Available
Interesting idea. I wonder how many students would use it for playing games instead of classwork?

Submitted by: Steven Kovarik
Opportune: Fund as Available
Looks like a class purpose but seems funny to use a game for a class.

Netcam watcher Pro

Submitted by: Steven Kovarik
Opportune: Fund as Available
Should look into overall funding across the college.
Submitted by: John Dickerson
  Questionable: Fund Partially
  We need to take a look at all the cameras and security systems being purchased this year to make sure we're spending the available funds economically.

Submitted by: Hap Steed
  Opportune: Fund as Available
  We need to combine all purchases of this in the college to see if we can get a good price.

Submitted by: Jim Wellman
  Important: Fund as Appropriate
  required for camera expansion project

Submitted by: Don Schlagell
  Questionable: Fund Partially
  I think this will be encompassed by the Capital project for camera equipment as discussed on 3/8/07

Submitted by: Chris McCoy
  Questionable: Fund Partially
  See comments about ME & AERE security cameras. All the security cameras need to be coordinated so that we're using the same models/line and same software. Otherwise, we're probably wasting resources.

Submitted by: Josh Klesel
  Imprudent: Do Not Fund
  This should be taken out and put into college wide capital project.
Proposer: Alan Kuuttila
Status: Approved (as outlined below)
Requested Funding: $9,260
Approved: $9,260

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<tr>
<td><strong>ABE and ME Joint MatLAB Toolbox SymHydraulics</strong></td>
<td>$3,250</td>
<td>$3,250</td>
</tr>
<tr>
<td>Description: The MathWorks (MatLAB Toolbox). ABE and ME joint proposal for SymHydraulics MatLAB Toolbox.</td>
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</tr>
<tr>
<td>Recurring Costs: 0</td>
<td></td>
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<tr>
<td>Courses: ABE and ME courses: AE 413, AE 447, TSM 337, ME 414 includes distance ed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope of Use: Department(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>License Size: 25 Network Licensed Copies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term: New</td>
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<td></td>
</tr>
<tr>
<td>ECRT RECOMMENDATION: Critical:Fund Now</td>
<td></td>
<td></td>
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</tbody>
</table>

| **LogixPro PLC Simulation Software**              | $510     | $510    |
| Description: PLC ladder programming training 15 licenses at $34 each |          |         |
| Recurring Costs: 0                                |          |         |
| Courses: TSM465, iTech, AE, ME, and EE students   |          |         |
| Scope of Use: Selected Systems                    |          |         |
| License Size: 15 seats                            |          |         |
| Term: New                                        |          |         |
| ECRT RECOMMENDATION: Critical:Fund Now           |          |         |

| **Matlab DAC Toolbox**                            | $3,000   | $3,000  |
| Description: 15 seats for Matlab DAC Toolbox at $200 a seat. The DAC toolbox will be used to replace old VB6 programing for AE404/504. |
| Recurring Costs: 0                                |          |         |
| Courses: AE404 and AE504                         |          |         |
| Scope of Use: College                            |          |         |
| License Size: 15 seats to be added to the Matlab license server |          |         |
| Term: New                                        |          |         |
| ECRT RECOMMENDATION: Critical:Fund Now           |          |         |

| **Moldflow Plastics Advisor**                     | $2,500   | $2,500  |
| Description: Design and analyze plastic parts    |          |         |
| Recurring Costs: 0                                |          |         |
| Courses: TSM 545 Manufacturability of Plastics. (2-2) Cr. 3 |          |         |
| Scope of Use: Selected Systems                    |          |         |
| License Size: Departmental Limited to 20 seats    |          |         |
| Term: Upgrade                                     |          |         |
| ECRT RECOMMENDATION: Critical:Fund Now           |          |         |
ABE: eCRT Review Panel Comments

ABE and ME Joint MatLAB Toolbox SymHydraulics

Submitted by: John Dickerson
   Questionable: Fund Partially
   Engineering students need to use Illustrator? I’d like to see what they need it for before I say yes to this.

Submitted by: Steven Kovarik
   Important: Fund as Appropriate
   New tools should be reviewed to see if they are actually used after the semester is over.

Submitted by: Chris McCoy
   Opportune: Fund as Available
   Some explanation of use/need would be nice to see. It’s unclear how many students, how much use, who else might use this software. What’s being used in the absence of this software? What alternatives might be available?

Submitted by: Josh Klesel
   Important: Fund as Appropriate
   Seems appropriate

Submitted by: Hap Steed
   Important: Fund as Appropriate
   Needed for class. Requested by ME and ABE faculty.

Submitted by: John Dickerson
   Important: Fund as Available
   Included with the student license

Submitted by: John Dickerson
   Important: Fund as Appropriate
   Sounds reasonable and it’s nice that it is being used by more than one department.

Submitted by: Steven Kovarik
   Opportune: Fund as Available
   Seems like overkill and should be limited to certain labs and not all labs.

LogixPro PLC Simulation Software

Submitted by: Steven Kovarik
   Important: Fund as Appropriate
   Needed to run simulations for classes.

Submitted by: Chris McCoy
   Opportune: Fund as Available
   We really need greater coordination of our controls facilities -- there is considerable duplication of effort and resources and it would be nice to provide at least one flagship facility that is outfitted with the best of software and hardware for all in the college to use. It’s difficult to determine if this software is necessary or not.

Submitted by: Josh Klesel, John Dickerson, Hap Steed
   Important: Fund as Appropriate
   Seems appropriate

Matlab DAC Toolbox

Submitted by: John Dickerson
What does DAC stand for? I'm assuming that it can be used by other departments when not used by the students in the specified classes.

Submitted by: Steven Kovarik
Opportune: Fund as Available
We should look into the costs of the current tool boxes and see if there is a price break somewhere in our current scheme.

Submitted by: Hap Steed, Jim Wellman, Don Schlagell, Josh Klesel
Opportune: Fund as Available
Seems reasonable

Submitted by: Chris McCoy
Opportune: Fund as Available
This is an interesting concept. Seems like a fairly small number of licenses though.

*Moldflow Plastics Advisor*

Submitted by: Steven Kovarik
Important: Fund as Appropriate
Looks like it is a restricted license so this is not out of line.

Submitted by: Chris McCoy
Opportune: Fund as Available
Fund, provided TSM students are now paying the Engineering Computer Fee.

Submitted by: Josh Klesel, Jim Wellman, Hap Steed
Important: Fund as Appropriate
Seems appropriate

Submitted by: John Dickerson
Opportune: Fund as Available
disappointing that it uses a fixed seat license.
Proposer: Don Schlagel  
Status: Approved (as outlined below)  
Requested Funding: $4,100  
Total Awarded: $4,100  

<table>
<thead>
<tr>
<th>Package/Description</th>
<th>Proposed</th>
<th>Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemkin</td>
<td>$1,600</td>
<td>$1,600</td>
</tr>
<tr>
<td>Description:</td>
<td>Chemkin software.</td>
<td></td>
</tr>
<tr>
<td>Recurring Costs:</td>
<td>1600 per year renewal</td>
<td></td>
</tr>
<tr>
<td>Courses:</td>
<td>CBE 652</td>
<td></td>
</tr>
<tr>
<td>Scope of Use:</td>
<td>Department(s)</td>
<td></td>
</tr>
<tr>
<td>License Size:</td>
<td>20 seat instructional for college use</td>
<td></td>
</tr>
<tr>
<td>Term:</td>
<td>Annual Maintenance</td>
<td></td>
</tr>
<tr>
<td>ECRT RECOMMENDATION:</td>
<td>Critical:Fund Now</td>
<td></td>
</tr>
</tbody>
</table>

| HySYS               | $2,500   | $2,500  |
| Description:        | HYSYS Chemical Process Simulator |
| Recurring Costs:    | $2500 / year |
| Courses:            | CBE 430 |
| Scope of Use:       | Department(s) |
| License Size:       | Departmental Unlimited |
| Term:               | Annual Maintenance |
| ECRT RECOMMENDATION:| Critical:Fund Now |
Chemkin

Submitted by: John Dickerson
  Important: Fund as Appropriate
  What exactly does this software do? I know we’ve been purchasing this software for a few years, so it’s obviously being used in some classes. It’s a floating license right?

Submitted by: Hap Steed
  Opportune: Fund as Available
  If need for class buy it. How many students does it serve?

Submitted by: Josh Klesel, Chris McCoy, Steven Kovarik
  Important: Fund as Appropriate
  Seems appropriate

HySYS

Submitted by: John Dickerson
  Important: Fund as Appropriate
  This is a pretty fundamental tool for familiarizing ChemE students with process flow design principles.

Submitted by: Josh Klesel, Chris McCoy, Hap Steed, Steven Kovarik
  Important: Fund as Appropriate
  Seems appropriate
Proposer: Josh Klesel  
Status: Approved (as outlined below)  
Requested Funding: $21,900  
Total Awarded: $18,900

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<tr>
<th>Package/Description</th>
<th>Proposed</th>
<th>Awarded</th>
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</thead>
<tbody>
<tr>
<td><strong>Autoturn 5.x</strong></td>
<td>$500</td>
<td>$500</td>
</tr>
<tr>
<td>Description:</td>
<td>AutoTURN 5.1 is a dynamic, advanced CAD-based software tool specifically created for the transportation design professional. This innovative and timesaving program puts you firmly in control of analyzing and evaluating vehicle maneuvers for projects such</td>
<td></td>
</tr>
<tr>
<td>Recurring Costs:</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Courses:</td>
<td>CE 453, 550</td>
<td></td>
</tr>
<tr>
<td>Scope of Use:</td>
<td>College</td>
<td></td>
</tr>
<tr>
<td>License Size:</td>
<td>College Unlimited</td>
<td></td>
</tr>
<tr>
<td>Term:</td>
<td>Annual Maintenance</td>
<td></td>
</tr>
<tr>
<td>ECRT RECOMMENDATION:</td>
<td>Critical:Fund Now</td>
<td></td>
</tr>
</tbody>
</table>

| **Microstation/STAAD/RAM** | $10,000 | $10,000 |
| Description: | MicroStation is an innovative CAD platform used by teams of architects, engineers, contractors and GIS professionals to integrate work on buildings, civil engineering projects, power plants and geospatial information. | |
| Recurring Costs: | 0 | |
| Courses: | CE 170, 332, 333, 334, 453, 485 and 486 | |
| Scope of Use: | University | |
| License Size: | University Unlimited | |
| Term: | Annual Maintenance | |
| ECRT RECOMMENDATION: | Critical:Fund Now | |

| **Networaker backup license** | $3,000 | $0 |
| Description: | Networker storage node and autochanger license for CCEE. Price includes 3 year maintainence. | |
| Recurring Costs: | 0 | |
| Courses: | All | |
| Scope of Use: | College | |
| License Size: | Departmental Unlimited | |
| Term: | New | |
| eCRT Panel Restrictions: | Contingent on implementation of SAN | |
| ECRT RECOMMENDATION: | Imprudent:Do Not Fund | |

| **SigmaPlot** | $5,000 | $5,000 |
| Description: | SigmaPlot 10 concurrent license. This price includes one year maintenance on 51 seats. 101 seats with 1 year maintenance would be $7,900, $1,800 recurring. | |
| Recurring Costs: | $1,200 | |
| Courses: | All? | |
| Scope of Use: | College | |
| License Size: | College Unlimited | |
| Term: | New | |
| ECRT RECOMMENDATION: | Opportune:Fund as Available | |

| **Timberline/Means DB** | $400 | $400 |
Description: Project estimating. Means database gives up to date information on cost structures of pay, materials, etc for different regions.
Recurring Costs: 0
Courses: ConE 421, 487, 488; CE 485, 510
Scope of Use: University
License Size: University Unlimited
Term: Annual Maintenance
ECRT RECOMMENDATION: Critical:Fund Now

TransCAD

Description: TransCAD is the first and only Geographic Information System (GIS) designed specifically for use by transportation professionals to store, display, manage, and analyze transportation data. TransCAD combines GIS and transportation modeling capabilities in
Recurring Costs: 0
Courses: CE 451 and 551
Scope of Use: College
License Size: College Unlimited
Term: Upgrade
ECRT RECOMMENDATION: Critical:Fund Now
CCEE: eCRT Review Panel Comments

**Autoturn 5.x**

Submitted by: John Dickerson
- Important: Fund as Appropriate
- "innovative and timesaving" How can you argue with that? What classes use this?

Submitted by: Chris McCoy, Steven Kovarik
- Important: Fund as Appropriate
- Routine annual. Fund as is.

**Microstation/STAAD/RAM**

Submitted by: John Dickerson
- Important: Fund as Appropriate
- Sounds like a pretty fundamental tool.

Submitted by: Chris McCoy, Steven Kovarik, Hap Steed
- Important: Fund as Appropriate
- Routine core software. Fund as is.

**Networker backup license**

Submitted by: Chris McCoy
- Questionable: Fund Partially
- Consider this in light of the SAN project and other file server needs. Also, need to determine if there is any department cost-sharing for this request.

Submitted by: Don Schlagell
- Opportune: Fund as Available
- do we need to look at maintaining networker at a lower level for those researchers who have bought into it?

Submitted by: John Dickerson
- Questionable: Fund Partially
- I was under the impression that this Networker storage node was mainly for departmental/research use. If so, this shouldn't be an EFTF funded resource.

Submitted by: Hap Steed
- Opportune: Fund as Available
- Have you considered Veritas Backup Exec.

Submitted by: Steven Kovarik
- Opportune: Fund as Available
- Should look closer at an overall scheme for backups across the college

**SigmaPlot**

Submitted by: Steven Kovarik
- Important: Fund as Appropriate
- Class use appropriate.

Submitted by: John Dickerson
- Opportune: Fund as Available
- It looks like this product has some specific features that are not available in other products that we install everywhere. For instance, the curve fitting and statistical plots are a nice complement to Matlab, since we haven't purchased the Matlab curve fitting tool box. This product is not cheap, but I'm in favor of purchasing it provided it can be made available across the college.
Submitted by: Hap Steed
  Questionable: Fund Partially
  Do the present products we have do the same things. Tech-Plot?

Submitted by: Don Schlagell
  Opportune: Fund as Available
  This would be a nice alternative for students to use. Sometimes Excel’s plotting capabilities just don’t cut it.

Submitted by: Chris McCoy
  Opportune: Fund as Available
  Need some more information about why this software is needed and how it will be used. Also, need to determine if this should be considered for college-wide portfolio.

**Timberline/Means DB**

Submitted by: John Dickerson
  Important: Fund as Appropriate
  The cost is pretty reasonable (i.e. cheap!) and it’s used by several classes.

Submitted by: Hap Steed
  Questionable: Fund Partially
  If it is for entire college, why not take it off the top?

Submitted by: Chris McCoy, Steven Kovarik
  Important: Fund as Appropriate
  Routine core software. Fund as is.

**TransCAD**

Submitted by: John Dickerson
  Opportune: Fund as Available
  Sounds like a pretty useful tool that might be valuable to other departments (e.g. ABE, ME). It’s a little pricey if just used in one or two classes, but if it can be made available to other departments I’m in favor of funding it.

Submitted by: Chris McCoy, Steven Kovarik
  Important: Fund as Appropriate
  Routine core software. Fund as is.

Submitted by: Hap Steed
  Opportune: Fund as Available
  If need for class, purchase it. It is a sever liense?
Proposer: Steven Kovarik
Status: Approved (as outlined below)
Requested Funding: $33,400
Total Awarded: $28,300

<table>
<thead>
<tr>
<th>Package/Description</th>
<th>Proposed</th>
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<tbody>
<tr>
<td>Altera Quartus</td>
<td>$1,500</td>
<td>$1,500</td>
</tr>
<tr>
<td>Description: Computer Engineering simulation and board connection software Recurring Costs: 1500 Courses: CPrE 210/288/388/488 Scope of Use: Department(s) License Size: Departmental Unlimited Term: Annual Maintenance ECRT RECOMMENDATION: Critical:Fund Now</td>
<td></td>
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</tr>
<tr>
<td>Altia</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Description: Embedded system Recurring Costs: 1000 Courses: CPrE 288/388/488 Scope of Use: Department(s) License Size: Departmental Unlimited Term: Annual Maintenance ECRT RECOMMENDATION: Critical:Fund Now</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ansoft HFSS</td>
<td>$1,500</td>
<td>$1,500</td>
</tr>
<tr>
<td>Description: HFSS is the industry-standard software for S-parameter and full-wave SPICE extraction and for the electromagnetic simulation of high-frequency and high-speed components. HFSS is widely used for the design of on-chip embedded passives, PCB interconnects, a Recurring Costs: 1500 Courses: courses on electromagnetics, microwave, microelectronics Scope of Use: Department(s) License Size: 10 Floating licenses Term: Upgrade ECRT RECOMMENDATION: Critical:Fund Now</td>
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<td></td>
</tr>
<tr>
<td>AWAS</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Description: Antenna and wave propagations Recurring Costs: 1000 Courses: EE 414/514 Scope of Use: Only 4 systems in Durham lab License Size: only 4 system license Term: Annual Maintenance ECRT RECOMMENDATION: Critical:Fund Now</td>
<td></td>
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</tr>
<tr>
<td>Cadence</td>
<td>$3,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>Description: VLSI Circuit design software Recurring Costs: 3000 Courses: EE/CPrE 230/435/465/501 Scope of Use: Department(s) License Size: Departmental Unlimited Term: Annual Maintenance</td>
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</tr>
</tbody>
</table>
ECRT RECOMMENDATION: Critical:Fund Now

**CodeSurfer**

Description: Software engineering development software  
Recurring Costs: 1000  
Courses: All software engineering courses  
Scope of Use: Department(s)  
License Size: 50 Seat floating  
Term: Annual Maintenance  
ECRT RECOMMENDATION: Critical:Fund Now

**CST Microwave Tools**

Description: CST MICROWAVE STUDIO® (CST MWS) is a specialist tool for the fast and accurate 3D EM simulation of high frequency problems. Applications include the expanding areas of Mobile Communication, Wireless Design (bluetooth), Signal Integrity, and EMC. Except  
Recurring Costs: 1800  
Courses: EE 414/514  
Scope of Use: Selected Systems  
License Size: Only a 2 seat license  
Term: Annual Maintenance  
ECRT RECOMMENDATION: Critical:Fund Now

**ETAPS**

Description: Power Engineering simulation software for Motors and transformers  
Recurring Costs: 1000  
Courses: EE 303/448/452/455/456/457  
Scope of Use: Selected Systems  
License Size: 20 seats  
Term: Annual Maintenance  
ECRT RECOMMENDATION: Critical:Fund Now

**iLogix**

Description: Software engineering software  
Recurring Costs: 1000  
Courses: Software engineering courses  
Scope of Use: Department(s)  
License Size: Department floating 50 seats  
Term: Annual Maintenance  
ECRT RECOMMENDATION: Critical:Fund Now

**Legato backup software**

Description: Software to backup servers. Upgrades to latest versions.  
Recurring Costs: 5000  
Courses: backup data for all users on the systems  
Scope of Use: servers  
License Size: Clients, raid array, etc  
Term: Upgrade  
eCRT Panel Restrictions: Contingent on implementation of SAN  
ECRT RECOMMENDATION: Imprudent:Do Not Fund

**Mallard**

Description: Mallard is a Web class software that works for ECpE lower class level instruction. This software will be going away but may need to be funded for an additional year as things are migrated to WebCT.  
Recurring Costs: 1100  
Courses: EE 201/230  
Scope of Use: Single Server License  
License Size: Unlimited uses on that server
<table>
<thead>
<tr>
<th>Software Portfolio Proposal, FY08</th>
</tr>
</thead>
</table>

### Mentor Graphics

- **Description:** Embedded systems software
- **Recurring Costs:** $2,500
- **Courses:** CPrE 288/388/488
- **Scope of Use:** Department(s)
- **License Size:** Departmental Unlimited
- **Term:** Annual Maintenance
- **ECRT RECOMMENDATION:** Critical: Fund Now

### Scientific Tools Encase

- **Description:** Software engineering design software
- **Recurring Costs:** $4,500
- **Courses:** All software engineering courses
- **Scope of Use:** Department(s)
- **License Size:** Department 20 seats floating
- **Term:** Annual Maintenance
- **ECRT RECOMMENDATION:** Critical: Fund Now

### Siemens/PTI PSS/E

- **Description:** Power Engineering simulation software for electrical grid
- **Recurring Costs:** $1,000
- **Courses:** EE 303/452/455/456/457
- **Scope of Use:** Selected Systems
- **License Size:** 10 seats
- **Term:** Annual Maintenance
- **ECRT RECOMMENDATION:** Critical: Fund Now

### Silvaco

- **Description:** End Chip design testing and verification software for VLSI
- **Recurring Costs:** $2,000
- **Courses:** EE/CPrE 230/435/465/501
- **Scope of Use:** Selected Systems
- **License Size:** 50 Seats
- **Term:** Annual Maintenance
- **ECRT RECOMMENDATION:** Critical: Fund Now

### Synopsys

- **Description:** VLSI design software
- **Recurring Costs:** $2,500
- **Courses:** EE/CPrE 230/435/465/501
- **Scope of Use:** Department(s)
- **License Size:** Departmental Unlimited
- **Term:** Annual Maintenance
- **ECRT RECOMMENDATION:** Critical: Fund Now

### VXWorks

- **Description:** Embedded systems simulation software and board connections
- **Recurring Costs:** $1,000
- **Courses:** CPrE 288/388/488
- **Scope of Use:** Department(s)
- **License Size:** Limited to 50 seats
- **Term:** Upgrade
- **ECRT RECOMMENDATION:** Critical: Fund Now
**WindRiver**

- **Description:** Embedded design Courses simulation software
- **Recurring Costs:** $1,000
- **Courses:** CPrE 288/388/488
- **Scope of Use:** Selected Systems
- **License Size:** Departmental Unlimited
- **Term:** Annual Maintenance
- **ECRT RECOMMENDATION:** Critical:Fund Now

**Xilinx**

- **Description:** Advanced board connection simulation software
- **Recurring Costs:** $1,000
- **Courses:** CPrE 288/388/488
- **Scope of Use:** Department(s)
- **License Size:** Departmental Unlimited
- **Term:** Annual Maintenance
- **ECRT RECOMMENDATION:** Critical:Fund Now
ECPE: eCRT Review Panel Comments

_Altera Quartus_

Submitted by: Hap Steed
- Opportune: Fund as Available
- No comment. I have no idea what this software does. If they need it. Buy it.

Submitted by: John Dickerson
- Important: Fund as Appropriate
- Seems like it’s a fills an important niche in board layout and design.

Submitted by: Chris McCoy
- Important: Fund as Appropriate
- Routine core software. Fund as is.

_Altia_

Submitted by: Hap Steed
- Questionable: Fund Partially
- More explanation as to what this software is and does. But if they have had it before and need it. Buy it.

Submitted by: Chris McCoy, John Dickerson
- Important: Fund as Appropriate
- Routine core software. Fund as is.

_Ansoft HFSS_

Submitted by: John Dickerson
- Important: Fund as Appropriate
- Seems reasonable

Submitted by: Chris McCoy, John Dickerson, Don Schlagell
- Important: Fund as Appropriate
- Routine core software? Fund as is.

_AWAS_

Submitted by: Chris McCoy
- Important: Fund as Appropriate
- Is this core software? Hard to determine. If so, fund as is, otherwise need more information.

Submitted by: John Dickerson
- Important: Fund as Appropriate
- Seems totally reasonable

Submitted by: Chris McCoy
- Important: Fund as Appropriate
- Is this core software? Hard to determine. If so, fund as is, otherwise need more information.

Submitted by: Hap Steed
- Opportune: Fund as Available
- If needed, purchase. How many students does this software service?

_Cadence_

Submitted by: Chris McCoy, John Dickerson
- Important: Fund as Appropriate
- Core software. Fund as is.
Submitted by: Hap Steed  
Opportune: Fund as Available  
Buy if need for teaching purposes

**CodeSurfer**

Submitted by: Chris McCoy  
Important: Fund as Appropriate  
Core software. Fund as is.

Submitted by: John Dickerson  
Important: Fund as Appropriate  
What does this software do? Could use a more detailed description.

**CST Microwave Tools**

Submitted by: John Dickerson  
Important: Fund as Appropriate  
Certainly not cheap per seat price, but then again it is pretty specialized. It's ok that only two people at a time can use it?

Submitted by: Chris McCoy, Hap Steed  
Important: Fund as Appropriate  
Core software. Fund as is.

**ETAPS**

Submitted by: Chris McCoy, John Dickerson, Don Schlagell  
Important: Fund as Appropriate  
Core software. Fund as is.

**iLogix**

Submitted by: Alan Kuutilla  
Important: Fund as Appropriate  
Is this software similar to what ABE has requested (LogixPro)? Can they be combined?

Submitted by: John Dickerson  
Important: Fund as Appropriate  
Could use a better description of what this does. But the cost seems pretty reasonable.

Submitted by: Chris McCoy, Hap Steed, Don Schlagell  
Important: Fund as Appropriate  
Core software. Fund as is.

**Legato backup software**

Submitted by: Chris McCoy  
Opportune: Fund as Available  
We need to examine our college-wide backup strategy to determine where and how to make the transition to a SAN/NAS and different backups systems. Legato software is expensive.

Submitted by: Don Schlagell  
Important: Fund as Appropriate  
I think we will need to maintain some degree of Legato in the college even after the SAN becomes available.

Submitted by: John Dickerson  
Opportune: Fund as Available  
If we get the NAS/SAN system, it's likely that we will be able to consolidate some of the backups we're doing and avoid some Networker licensing. ECSS will definitely have extra licenses available. Perhaps we could use a single backup
server and convert backups.ece to a storage node? The license might be cheaper in the long run. I’d say let’s go ahead and reserve this amount, but see if we can’t reduce the costs.

**Mallard**

Submitted by: John Dickerson  
Questionable: Fund Partially  
quack! It seems that Mallard is always listed as "this will be going away soon". Maybe we should just use the funds for this to pay for someone to transition it to WebCT, instead of renewing it every year.

Submitted by: Don Schlagel  
Imprudent: Do Not Fund  
Web CT "clone" Shouldn’t take a year to migrate.

Submitted by: Chris McCoy  
Imprudent: Do Not Fund  
ITS is planning to implement a Moodle server, which might be an even better solution than WebCT. I would recommend not investing any more dollars into Mallard, but redirecting to Moodle. Moodle is an open-source product designed by educators.

**Mentor Graphics**

Submitted by: Chris McCoy, John Dickerson, Don Schlagell  
Important: Fund as Appropriate  
Core software. Fund as is.

**Scientific Tools Encase**

Submitted by: John Dickerson  
Opportune: Fund as Available  
This needs a better description of what this is for. What classes are expected to use it?

Submitted by: Chris McCoy  
Important: Fund as Appropriate  
Routine core software. Fund as is.

**Siemans/PTI PSS/E**

Submitted by: Chris McCoy, John Dickerson, Don Schlagell  
Important: Fund as Appropriate  
Routine core software. Fund as is.

**Silvaco**

Submitted by: Chris McCoy, John Dickerson, Don Schlagell  
Important: Fund as Appropriate  
Routine core software. Fund as is.

**Synopsys**

Submitted by: Chris McCoy, John Dickerson, Don Schlagell  
Important: Fund as Appropriate  
Routine core software. Fund as is.

**VXWorks**

Submitted by: Chris McCoy, John Dickerson, Don Schlagell  
Important: Fund as Appropriate  
Core software. Fund as is.

**WindRiver**
Submitted by: Chris McCoy, John Dickerson, Don Schlagell
Important: Fund as Appropriate
Core software. Fund as is.

Xilinx

Submitted by: Chris McCoy, John Dickerson, Don Schlagell
Important: Fund as Appropriate
Routine core software. Fund as is.
Proposer: Jeffrey Eichorn
Status: Approved (as outlined below)
Requested Funding: $43,460
Total Awarded: $28,460

<table>
<thead>
<tr>
<th>Package/Description</th>
<th>Proposed</th>
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</thead>
<tbody>
<tr>
<td><strong>Adobe Writer</strong></td>
<td>$1,800</td>
<td>$1,800</td>
</tr>
<tr>
<td>Description: create pdf documents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurring Costs: 1800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses: Multiple</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope of Use: Department(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>License Size: 60</td>
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<td></td>
</tr>
<tr>
<td>Term: New</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECRT RECOMMENDATION: Critical: Fund Now</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Coordinate Measuring Machine Software (PCDMIS)**       | $15,000  | $15,000 |
| Description: metrology software upgrade for CMM         |          |         |
| Recurring Costs: 0                                       |          |         |
| Courses: IE 248 348 448 361 446/546 449/549              |          |         |
| Scope of Use: Department(s)                              |          |         |
| License Size: 1                                          |          |         |
| Term: Upgrade                                           |          |         |
| ECRT RECOMMENDATION: Critical: Fund Now                 |          |         |

| **CPLEX**                                                | $1,000   | $1,000  |
| Description: Optimization software                       |          |         |
| Recurring Costs: 1000                                     |          |         |
| Courses: IE 510                                          |          |         |
| Scope of Use: Department(s)                              |          |         |
| License Size: 10                                         |          |         |
| Term: Upgrade                                           |          |         |
| ECRT RECOMMENDATION: Critical: Fund Now                 |          |         |

| **Lindo/Lingo**                                          | $1,500   | $1,500  |
| Description: Optimization software                       |          |         |
| Recurring Costs: 1500                                     |          |         |
| Courses: IE 312, IE 341                                   |          |         |
| Scope of Use: Department(s)                              |          |         |
| License Size: 20                                         |          |         |
| Term: Annual Maintenance                                  |          |         |
| ECRT RECOMMENDATION: Critical: Fund Now                 |          |         |

<p>| <strong>Magics RP</strong>                                            | $1,560   | $1,560  |
| Description: Rapid Prototyping                           |          |         |
| Recurring Costs: 1560                                     |          |         |
| Courses: IE 248 448 449 446/546                          |          |         |
| Scope of Use: Department(s)                              |          |         |
| License Size: 10                                         |          |         |
| Term: Annual Maintenance                                  |          |         |
| ECRT RECOMMENDATION: Critical: Fund Now                 |          |         |</p>
<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
<th>Recurring Costs</th>
<th>Courses</th>
<th>Scope of Use</th>
<th>License Size</th>
<th>Term</th>
<th>eCRT Panel Restrictions</th>
<th>ECRT Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MasterCAM</td>
<td>path planning for CNC machining</td>
<td>$5,000</td>
<td>IE 248, 448, 446/546, 545, 449/549</td>
<td>Department(s)</td>
<td>Departmental Unlimited</td>
<td>Annual Maintenance</td>
<td>Funded at the College level</td>
<td>Critical: Fund Now</td>
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<tr>
<td>Mathematica</td>
<td>Mathematical modeling</td>
<td>$3,000</td>
<td>IE 312 341 513 510</td>
<td>Department(s)</td>
<td>Departmental Unlimited</td>
<td>Annual Maintenance</td>
<td>Investigate alternatives and determine what it takes to push out college wide</td>
<td>Critical: Fund Now</td>
</tr>
<tr>
<td>Rapidform</td>
<td>Software to input data from laser scanner and create CAD models</td>
<td>$1,400</td>
<td>IE 248 348 448 446/546 449/549</td>
<td>Department(s)</td>
<td>2</td>
<td>Annual Maintenance</td>
<td>Critical: Fund Now</td>
<td>Critical: Fund Now</td>
</tr>
<tr>
<td>Sigmanest</td>
<td>Cam nesting software</td>
<td>$3,000</td>
<td>IE 248</td>
<td>Department(s)</td>
<td>20</td>
<td>Upgrade</td>
<td>Critical: Fund Now</td>
<td>Critical: Fund Now</td>
</tr>
<tr>
<td>Vericut</td>
<td>Modeling and analysis of machining processes</td>
<td>$10,000</td>
<td>IE 248 448 449 546</td>
<td>Department(s)</td>
<td>10</td>
<td>Annual Maintenance</td>
<td>Investigate sharing between ME/IMSE</td>
<td>Critical: Fund Now</td>
</tr>
</tbody>
</table>
IMSE: eCRT Review Panel Comments

Adobe writer
Submitted by:
  Opportune: Fund as Available
  Students are asking for software that will edit existing PDF documents, not just convert a document to PDF format.

Submitted by: Chris McCoy
  Opportune: Fund as Available
  The question of PDF writing software is still up in the air. For now, this seems appropriate, but considering that Office 2007 has a PDF writer built-in, is this software still necessary?

Submitted by: Don Schlagell
  Questionable: Fund Partially
  DO we need this since O2k7 has pdf writing capability now?

Submitted by: John Dickerson
  Questionable: Fund Partially
  60 seats? That's three full labs. Why not just buy a few copies per lab and leave it at that?

Submitted by: Hap Steed
  Questionable: Fund Partially
  Can't we get a deal to provide this for the entire college?

cordinate measuring machine software (PCDMIS)

Submitted by: Don Schlagell
  Questionable: Fund Partially
  Seems rather pricey for ONE seat.

Submitted by: Chris McCoy
  Questionable: Fund Partially
  This software was funded last year as an upgrade? Is the upgrade an annual event or was an upgrade not purchased in FY2007? Should this really be annual maintenance?

Submitted by: Steven Kovarik; Hap Steed
  Important: Fund as Appropriate
  Appropriate

Submitted by: Mike Renze
  Important: Fund as Appropriate
  We have three coordinate measuring machines. Two are using software is nearly 6 years old. We would like to upgrade to the same version on all three machines.

Submitted by: John Dickerson
  Questionable: Fund Partially
  If i’m not mistaken, this is the most expensive software in the college and has far less cross-department utility than other tools. I’d like to see the quote for this baby to verify what it is that we’re buying.

CPLEX

Submitted by: Steven Kovarik
  Opportune: Fund as Available
  Fairly advanced software. ECpE Grad students use this software and may have a need in the future

Submitted by: Chris McCoy
  Important: Fund as Appropriate
  I believe this software is mis-categorized as "upgrade". This should probably be "annual maintenance".
Submitted by: Don Schlagell  
Important: Fund as Appropriate  
ok

Submitted by: John Dickerson  
Important: Fund as Appropriate  
Is this the same CPLEX that ECPE uses? Can these be consolidated? Is this a floating license?

Submitted by: Mike Renze  
Important: Fund as Appropriate  
This is an annual maintenance expense. It is the same software that EE uses, but I don’t see in their software request this year. It is a 10-seat floating license.

Lindo/Lingo

Submitted by: Mike Renze  
Important: Fund as Appropriate  
Lindo/Lingo is currently a site license for the dept. It's used for linear, non-linear, and integer problem solving.

Submitted by: Chris McCoy, Steven Kovarik, Don Schlagel  
Important: Fund as Appropriate  
Core software. Fund as is.

Submitted by: John Dickerson  
Important: Fund as Appropriate  
Is this a floating license? It needs more description of what this software does. Can it be used by other engineering disciplines or is it specific to IE?

Magics RP

Submitted by: John Dickerson  
Important: Fund as Appropriate  
seems reasonable. Rapid-prototyping is a pretty common engineering approach. Does this have utility elsewhere in the college?

Submitted by: Chris McCoy, Don Schlagel, Steven Kovarik  
Important: Fund as Appropriate  
Core software. Fund as is.

Submitted by: Hap Steed  
Opportune: Fund as Available  
ok. Is this the same software ME uses in ME 415 and ME 270. If so, maybe we can join together with IMSE.

MasterCAM

Submitted by: Chris McCoy, Josh Klesel, Steven Kovarik, Hap Steed, John Dickerson, Don Schlagel  
Inappropriate: Fund Elsewhere  
This is covered by the college portfolio. It should not be funded here as it is funded in another place in this budget.

Mathematica

Submitted by: Mike Renze  
Critical: Fund Now  
The university used to have a site license for Mathematica. After it lapsed several years ago, we purchased a 9-seat floating license. Estimated cost of a university-wide license in the 50K range a couple years ago. Current cost for college or university license unknown.

Submitted by: John Dickerson  
Opportune: Fund as Available  
As I recall, I asked last year whether this was a college resource. Is this a floating license? There are numerous departments that would like to have access to Mathematica. Is this possible?
Submitted by: Hap Steed
  Questionable: Fund Partially
  What is the cost of college license. ME has had some request for this software in the past. Can we get a floating license and use keyserver?

Submitted by: Chris McCoy, Steven Kovarik, Don Schlagel
  Important: Fund as Appropriate
  Core software. Fund as is.

Rapidform

Submitted by: Chris McCoy, Steven Kovarik, Hap Steed, John Dickerson, Don Schlagell, Alan Kuutilla
  Important: Fund as Appropriate
  Core software. Fund as is.

Sigmanest

Submitted by: Steven Kovarik, Don Schlagell
  Important: Fund as Appropriate
  appropriate

Submitted by: Chris McCoy
  Important: Fund as Appropriate
  Seems appropriate. Lacks some specifics on the nature of the software and why the upgrade is needed now, but appears to be core software.

Submitted by: Hap Steed
  Opportune: Fund as Available
  What is Cam nesting software. If you need it for class. buy

Submitted by: John Dickerson
  Important: Fund as Appropriate
  Cam nesting. Apparently this is important enough that people will pay $3000 for the privilege. I'll happily defer to others on this one.

Submitted by: Mike Renze
  Important: Fund as Appropriate
  The version of SigmaNEST currently being used is 4 years old and 2 versions behind what industry is using.

Solidcast

Submitted by: Chris McCoy, Don Schlagell, Hap Steed, Steven Kovarik, John Dickerson
  Important: Fund as Appropriate
  Fund as is.

Vericut

Submitted by: Hap Steed
  Opportune: Fund as Available
  ME has used this software in the past. Will it be a floating license so ME could use a seat or two if needed?

Submitted by: Chris McCoy, Don Schlagell, John Dickerson, Steven Kovarik
  Important: Fund as Appropriate
  Purchased last year with expected annual renewal. Fund as is.
Proposer: Josh Klesel  
Status: Approved (as outlined below)  
Requested Funding: $5,100  
Total Awarded: $5,100

<table>
<thead>
<tr>
<th>Package/Description</th>
<th>Proposed</th>
<th>Awarded</th>
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</thead>
<tbody>
<tr>
<td>Endnote 10</td>
<td>$2,300</td>
<td>$2,300</td>
</tr>
</tbody>
</table>

Description: industry standard software for organizing references and creating bibliographies.
Recurring Costs: 0
Courses: All - MSE, especially graduate courses.
Scope of Use: Department(s)
License Size: Departmental Unlimited
Term: Upgrade
eCRT Panel Restrictions: Investigate use of Keyserver
ECRT RECOMMENDATION: Opportune: Fund as Available

Photoshop CS 2

Description: General Photo Manipulation
Recurring Costs: 0
Courses: All - MSE; If Keyserver was used, the cost would be $480 for 3 concurrent licenses.
Scope of Use: Department(s)
License Size: Departmental Unlimited
Term: New
eCRT Panel Restrictions: Investigate use of Keyserver; if able to decrease license purchase to 3
ECRT RECOMMENDATION: Opportune: Fund as Available
MSE: eCRT Review Panel Comments

Endnote 10
Submitted by: John Dickerson
  Questionable: Fund Partially
  End note is a fine tool, but I think this is kind of a gray area application that is more suited to dissertation/research activities. But I think a partial funding of this by EFTF is appropriate for some academic use.

Submitted by: Don Schlagell
  Questionable: Fund Partially
  Could this be leveraged with other departments? Perhaps expanded? CBE has an earlier Endnote license for 11 machines and would be interested in upgrading. Maybe a college site license? Some dept. funds should probably be used to help offset the cost.

Submitted by: Chris McCoy
  Questionable: Fund Partially
  Should some of this be cost-shared with department?

Submitted by: Steven Kovarik
  Opportune: Fund as Available
  seems limited to few. Would like to see usage statistics

Photoshop CS 2

Submitted by: Don Schlagell
  Opportune: Fund as Available
  I could see this being useful in working with x-ray photos to aid in determining crystal geometry, or for enhancing SEM or TEM images. You are not specific as to how it will be used.

Submitted by: Chris McCoy
  Questionable: Fund Partially
  Some explanation of need would be nice. It's hard to tell what the need is and how this provides a solution to the need.

Submitted by: Steven Kovarik
  Opportune: Fund as Available What is this used for??? No class use?

Submitted by: John Dickerson
  Questionable: Fund Partially
  Engineering students use Photoshop? I'd to see how they use it before I give this the green light. For simple photo/image manipulation, GIMP is free and can be installed anywhere.
Software Portfolio Proposal, FY08

Proposer: Hap Steed  
Status: Approved (as outlined below)  
Requested Funding: $58,388  
Total Awarded: $48,539

<table>
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<tr>
<th>Package/Description</th>
<th>Proposed</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Acronis</td>
<td>$600</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Acronis**

- **Description:** This is imaging software used to image entire hard drives. 1 server license 30 desktop/laptop license.
- **Recurring Costs:** $600
- **Courses:** This software is used by system administrator to image computers in the ME department. This includes but is not limited to systems in: the ME / IMSE media center, engine lab, heat transfer, controls lab and instrumentation lab.
- **Scope of Use:** Department(s)
- **License Size:** 1 Server, 33 desktop-laptop
- **Term:** Annual Maintenance
- **eCRT Panel Restrictions:** College standard is Ghost.
- **ECRT RECOMMENDATION:** Imprudent: Do Not Fund

<table>
<thead>
<tr>
<th>Package/Description</th>
<th>Proposed</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Adobe Audition</td>
<td>$780</td>
<td>$780</td>
</tr>
</tbody>
</table>

**Adobe Audition**

- **Description:** Waveform capture and editing software.
- **Recurring Costs:** $0
- **Courses:** ME 411 Controls Class
- **Scope of Use:** Department(s)
- **License Size:** 3 year maintenance - 10 seats
- **Term:** Annual Maintenance
- **ECRT RECOMMENDATION:** Critical: Fund Now

<table>
<thead>
<tr>
<th>Package/Description</th>
<th>Proposed</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Adobe Encore DVD</td>
<td>$280</td>
<td>$280</td>
</tr>
</tbody>
</table>

**Adobe Encore DVD**

- **Description:** Create DVDs that reflect your best work. Packed with a rich set of creative tools, Adobe® Encore® DVD 2.0 software helps you create striking DVD titles for film, business, training, events, and more. With unmatched Adobe Photoshop® software integration an
- **Recurring Costs:** $0
- **Courses:** ME/IMSE media center
- **Scope of Use:** College
- **License Size:** 2 copies
- **Term:** New
- **ECRT RECOMMENDATION:** Opportune: Fund as Available

<table>
<thead>
<tr>
<th>Package/Description</th>
<th>Proposed</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Adobe Illustrator</td>
<td>$180</td>
<td>$180</td>
</tr>
</tbody>
</table>

**Adobe Illustrator**

- **Description:** Adobe® Illustrator® CS2 software gives you new creative freedom that lets you realize your ideas quickly and powerfully. Instantly convert bitmaps to vector artwork and paint more intuitively. Save time with intelligent palettes and optimized workspaces.
- **Recurring Costs:** $0
- **Courses:** 2 copies used in ME/IMSE media center
- **Scope of Use:** College
- **License Size:** 2 - copies
- **Term:** New
- **ECRT RECOMMENDATION:** Opportune: Fund as Available

<table>
<thead>
<tr>
<th>Package/Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Adobe Photoshop</td>
<td>$570</td>
<td>$570</td>
</tr>
</tbody>
</table>

Software Portfolio Proposal, FY08  
75  
8/27/2007
Description: Adobe® Photoshop® CS2 software, the professional image-editing standard and leader of the Photoshop digital imaging line, delivers more of what you crave. Groundbreaking creative tools help you achieve extraordinary results. Unprecedented adaptability lets

Recurring Costs: 0
Courses: For use in ME/IMSE media center
Scope of Use: College
License Size: 2- copies
Term: New
ECRT RECOMMENDATION: Opportune:Fund as Available

Adobe Premiere Pro 2.0 ...........................................................................................................................................$600.........................$600

Description: Make every frame count with Adobe® Premiere® Pro 2.0 software, the essential tool for professional video editing. Capture and edit virtually any format, from DV to uncompressed HD, and output to tape, DVD, and the web. Providing unparalleled integration w

Recurring Costs: 0
Courses: Used in ME/IMSE media center
Scope of Use: College
License Size: 2- copies
Term: New
ECRT RECOMMENDATION: Opportune:Fund as Available

Advant-Edge Third Wave Systems ......................................................................................................................$5,000.........................$5,000

Description: CD/CAM simulation software
Recurring Costs: 2000
Courses: ME 324, ME 527
Scope of Use: Department(s)
License Size: 10 floating license - use key serve software for distrubition
Term: New
ECRT RECOMMENDATION: Critical:Fund Now

CDS .................................................................................................................................................................................$400.........................$400

Description: Trane HVAC software
Recurring Costs: 400
Courses: ME 442
Scope of Use: Selected Systems
License Size: Departmental Unlimited
Term: Annual Maintenance
ECRT RECOMMENDATION: Critical:Fund Now

COMSOL ......................................................................................................................................................................$5,750.................................$0

Description: Multiphysics modeling package for chemical engineering, reaction engineering, structural mechanics, heat transfer, rf/optical analysis, and signal and systems analysis. Includes material library and CAD import form SolidWorks. Floating network license for
Recurring Costs: 5750
Courses: Course Development. 2 students per semester for 1 year . Integration into ME 335 and ME 637.
Scope of Use: Department(s)
License Size: Departmental Unlimited
Term: New
eCRT Panel Restrictions: Funded at the College Level

Coordinate Measuring Machine Software ..................................................................................................................$15,000 ......................$15,000

Description: This software assists in profiling and dimensioning the parts in a coordinate measuring machine in the area of CAD/CAM.
Recurring Costs: None
Courses: ME 324, ME 520, ME 528, IMSE 248, IMSE 448
Expected number of students use 300 per year
Design for Manufacturability and Assembly (DFMA 2006) ................................................................. $12,450 $12,450

**Description:** DFMA 2006 is a materials-manufacturing-cost analysis software that guides engineers through the process of simplifying a product design, then estimates assembly labor and part manufacturing costs. The software contains early cost models for material and recurring costs.

**Recurring Costs:** None

**Courses:** ME 324, ME 520, ME 527, IMSE 248, IMSE 448, ITEC courses

Diskeeper ........................................................................................................................................... $400 $400

**Description:** Management software to keep hard drive defragged

**Recurring Costs:** $200

**Courses:** Used by system administrators on servers and admin workstations

Drive Shield ........................................................................................................................................ $200 $200

**Description:** Hard drive protection software.

**Recurring Costs:** $200

**Courses:** Used on all ME/IMSE media center laptops, System admin computers, Heat transfer lab computers, Engine lab computers.

General Software ............................................................................................................................... $2,500 $0

**Description:** Throughout the year someone will come in and ask for a small budget software package they need or want to try that was not in the original budget. There is no mechanism in the present system to address these request in a quick and timely manner. I propose

**Recurring Costs:** 0

**Courses:** All courses

GT-Power ............................................................................................................................................... $3,000 $3,000

**Description:** Engines analysis software

**Recurring Costs:** $3,000

**Courses:** ME 449

**Scope of Use:** Selected Systems

**License Size:** Departmental Unlimited

**Term:** Annual Maintenance

Key Server ............................................................................................................................................... $612 $612

**Scope of Use:** Department(s)

**License Size:** Departmental Unlimited

**Term:** Upgrade

ECRT RECOMMENDATION: Critical:Fund Now
Description: A licensing distribution software package. Also used for tracking software usage on lab computers and login activity.
Recurring Costs: 612
Courses: ME 442, ME 449, ME 561,
Scope of Use: Department(s)
License Size: Departmental Unlimited
Term: Annual Maintenance
eCRT Panel Restrictions: If approved at the college level department will not purchase
ECRT RECOMMENDATION: Critical:Fund Now

Log-Me In ..........................................................................................................................$250 ......................$250

Description: 5 seats of remote log-in software
Recurring Costs: 250
Courses: Used by system admin for remote log-in and data transfer
Scope of Use: Selected Systems
License Size: Departmental Unlimited
Term: Annual Maintenance
ECRT RECOMMENDATION: Important:Fund as Appropriate

MCAfee Desktop Firewall .........................................................................................................$170 ......................$170

Description: 25 seats - firewall software
Recurring Costs: 170
Courses: Used by system administrator for added firewall protections on all server, backup, administration systems.
Scope of Use: Selected Systems
License Size: Departmental Unlimited
Term: Annual Maintenance
ECRT RECOMMENDATION: Important:Fund as Appropriate

Netcam Watcher Software ....................................................................................................$999 ......................$0

Description: Software for recording security camera images
Recurring Costs: 0
Courses: Used for security in computer labs in Black
Scope of Use: Department(s)
License Size: Departmental Unlimited
Term: New
eCRT Panel Restrictions: Combine with Capital Project proposal for cameras
ECRT RECOMMENDATION: Inappropriate:Fund Elsewhere

Space Guard .........................................................................................................................$140 ......................$140

Description: Disk Quota software
Recurring Costs: 140
Courses: Used on student data server as quota manager
Scope of Use: Selected Systems
License Size: Departmental Unlimited
Term: Annual Maintenance
ECRT RECOMMENDATION: Opportune:Fund as Available

SPIP .....................................................................................................................................$8,007 ......................$ 8,007

Description: Scanning Probe Imaging Processor
Recurring Costs: 0
Courses: ME 561
Scope of Use: College
License Size: 10 Floating License - Use Key Server
Term: Upgrade
ECRT RECOMMENDATION: Critical:Fund Now

Veritas Backup .........................................................................................................................$500 ......................$500
<table>
<thead>
<tr>
<th>Description:</th>
<th>Veritas Version 11 Backup software.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurring Costs:</td>
<td>500</td>
</tr>
<tr>
<td>Courses:</td>
<td>This software is used by the system administrator for backing up student data</td>
</tr>
<tr>
<td>Scope of Use:</td>
<td>Selected Systems</td>
</tr>
<tr>
<td>License Size:</td>
<td>Used on student server for backup of data files</td>
</tr>
<tr>
<td>Term:</td>
<td>Annual Maintenance</td>
</tr>
<tr>
<td>eCRT Panel Restrictions:</td>
<td>Contingent upon implementation of SAN</td>
</tr>
<tr>
<td>ECRT RECOMMENDATION:</td>
<td>Opportune: Fund as Available</td>
</tr>
</tbody>
</table>
ME: eCRT Review Panel Comments

Acronis

Submitted by: John Dickerson
Questionable: Fund Partially
Did we fund this for the current year? I thought there was substantial discussion last year about whether this product was still necessary given how we build machines now.

Submitted by: Chris McCoy
Questionable: Fund Partially
This seems to be an approach that is counter to our college-wide plan for system builds. Some additional explanation would be helpful to determine if this is really appropriate.

Note this is not educational software, but a management tool.

Submitted by: Don Schlagel
Questionable: Fund Partially
I thought the college approach was using GHOST for lab base images and the unattended CD for new builds. This seems contrary to our current direction.

Submitted by: Hap Steed
Important: Fund as Appropriate
This software is vital to the maintenance operations of ME. We have been using it for two years. It is used to make images for all the laptops in the media center: images of any and all Lab systems once they are built, system admin machine, print and data servers. Because we have a variety of builds for all the different labs this software is necessary. Rebuilding a computer with this software takes minutes not hours or days.

Submitted by: Josh Klesel
Imprudent: Do Not Fund
What does this software give you that Ghost does not?

Adobe Audition

Submitted by: Chris McCoy, Don Schlagell
Important: Fund as Appropriate
Core software. Fund as is.

Submitted by: John Dickerson
Important: Fund as Appropriate
I’m just curious how this software is used. One doesn't often associate Adobe with waveform capturing. But hey, if it's working for you, I say fund it.

Adobe Encore DVD

Submitted by: Steven Kovarik
Questionable: Fund Partially
Seems like a limited use and limited users
Submitted by: Don Schlagel
  Questionable: Fund Partially
  How will this benefit students?

Submitted by: Hap Steed
  Opportune: Fund as Available
  Software used by all engineering students in creating dvd of projects and presentations. This is only one of several software packages requested for the media center in Black. Apart from this students have limited software options without buying software themselves.

Submitted by: John Dickerson
  Important: Fund as Appropriate
  I guess for burning DVDs and assembling media, it's as good as anything. It sounds like it has a multi-media flair. Is that what it's intended for? Does it require a special player to view what's stored on it?

Submitted by: Chris McCoy
  Questionable: Fund Partially
  Is this what we plan to have students use to burn DVDs in the college?

Adobe Illustrator

Submitted by: Steven Kovarik
  Questionable: Fund Partially
  Seems like a limited use and limited users

Submitted by: Chris McCoy
  Questionable: Fund Partially
  Is this software used by the students or by employees? It's not clear just what the students get from this.

Submitted by: Hap Steed
  Opportune: Fund as Available
  Software used by all engineering students to edit digital media. This is only one of several software packages requested for the media center in Black. Apart from this students have limited software options without buying software themselves.

Submitted by: Don Schlagel
  Questionable: Fund Partially
  How will this benefit students?

Adobe Photoshop

Submitted by: John Dickerson
  Questionable: Fund Partially
  Engineering students use Photoshop? I'd like to see what it is they need it for before I say yes to this. By the way, GIMP is free and has a lot of powerful features. Oh sure, it's not as fancy as Photoshop but you can't argue with free.

Submitted by: Chris McCoy
  Questionable: Fund Partially
  Is this software used by the students or by employees? It's not clear just what the students get from this.

Submitted by: Hap Steed
  Opportune: Fund as Available
  Software used by all engineering students to edit digital photographs. This is only one of several software packages requested for the media center in Black. Apart from this students have limited software options without buying software themselves.

Submitted by: Steven Kovarik
  Questionable: Fund Partially
  Seems like a limited use and limited users
Submitted by: Don Schlagel
Questionable: Fund Partially
how is this going to benefit the students?

Adobe Premiere Pro 2.0

Submitted by: Steven Kovarik
Questionable: Fund Partially
Seems like a limited use and limited users

Submitted by: John Dickerson
Opportune: Fund as Available
I believe that students need to have access to video-editing software. Sounds reasonable.

Submitted by: Hap Steed
Opportune: Fund as Available
Software used by all engineering students to edit digital videos. This is only one of several software packages requested for the media center in Black. Apart from this students have limited software options without buying software themselves.

Submitted by: Chris McCoy
Questionable: Fund Partially
Is this software used by the students or by employees? It's not clear just what the students get from this.

Submitted by: Don Schlagel
Questionable: Fund Partially
I didn't know ME had courses dealing with video editing.

Advant-Edge Third Wave Systems

Submitted by: John Dickerson
Opportune: Fund as Available
So this performs a different role than, say, Vericut or MasterCAM? What unique capabilities does this provide?

Submitted by: Chris McCoy
Opportune: Fund as Available
Since this is "new" software, it would be nice to see greater explanation of why this software is needed and how it will fit within the department to fill a specific need.

Submitted by: Steven Kovarik, Don Schlagell
Important: Fund as Appropriate
Class appropriate

CDS

Submitted by: Chris McCoy, Don Schlagell, Steven Kovarik, John Dickerson
Important: Fund as Appropriate
Routine core software. Fund as is.

COMSOL

Submitted by: Don Schlagell
Inappropriate: Fund Elsewhere
I thought we already had an existing COMSOL license.

Submitted by: Steven Kovarik
Important: Fund as Appropriate
class appropriate

Submitted by: John Dickerson
Imprudent: Do Not Fund
This is already included in the off-the-top portfolio.

Submitted by: Chris McCoy
Inappropriate: Fund Elsewhere
This is funded as part of the college portfolio (FEMLab-COMSOL). Funding is located elsewhere in this budget.

Coordinate Measuring Machine Software

Submitted by: Chris McCoy
Opportune: Fund as Available
Expensive. Some additional information on why this software requires upgrade now would be helpful.

Submitted by: John Dickerson
Questionable: Fund Partially
Is this the same coordinate measuring software that IMSE is seeking? Can the purchase of the licenses be shared? I’d like to get an answer on that before I give this a green light.

Submitted by: Steven Kovarik, Don Schlagell
Important: Fund as Appropriate
Class appropriate

Design for Manufacturability and Assembly (DFMA 2006)

Submitted by: John Dickerson
Opportune: Fund as Available
So this is one-time cost? Is the recurring cost estimate accurate? It sounds like an important tool. I say fund it if we can afford it.

Submitted by: Don Schlagell
Opportune: Fund as Available
ok

Submitted by: Chris McCoy
Opportune: Fund as Available
Looks like an interesting opportunity. Do we know what resources are required to use this software? Hardware, storage, etc.?

Submitted by: Steven Kovarik
Important: Fund as Appropriate
Class appropriate

Diskeeper

Submitted by: Steven Kovarik
Imprudent: Do Not Fund
not appropriate in current scheme

Submitted by: Chris McCoy
Imprudent: Do Not Fund
Not sure of the role of defragging these systems anymore.

Submitted by: Josh Klesel
Imprudent: Do Not Fund
I don’t see how this is a reasonable expense when there is an OK built-in defragmenter in the OS.

Submitted by: Hap Steed
Critical: Fund Now
Defragging is a necessary maintenance process. This product is 10 times better that the defragger in Windows XP. It is used to keep the system administrator’s machines running at their peak. This product is also used to defrag lab builds
before they are imaged and all the systems in the ME/IMSE media center. As oil change is to a car so is a good
defragger to a computer. You don't have to change oil, or do you? Time will tell.

Submitted by: Don Schlagell
Imprudent:Do Not Fund
Use windows internal defragmenter.

Submitted by: John Dickerson
Imprudent:Do Not Fund
What servers do you use this on? It is hoped that the NAS/SAN system will greatly reduce the need for departments
to manage their own server storage. Besides, if you're just creating a Windows file server, might I suggest running
RHEL4 with Samba. It's a superior Windows file server and you don't have to worry about disk-fragmentation.

Drive Shield

Submitted by: Steven Kovarik
Imprudent:Do Not Fund
not appropriate in current scheme

Submitted by: John Dickerson
Imprudent:Do Not Fund
I thought we discussed this ad nauseum last year. Was it funded last year?

Submitted by: Hap Steed
Important:Fund as Appropriate
A critical piece of software used to protect computers from failure. This product is used on all the laptops that are
checked out to students in the ME/IMSE media center. It is also used to protect specialized lab build machines. It is not
used on open lab systems. Saving time is saving money. This product saves build time. This product is essential to the
ME maintenance operations.

Submitted by: Chris McCoy
Imprudent:Do Not Fund
What? This does not seem to fit with the college-wide approach. More discussion needed.

Submitted by: Don Schlagell
Imprudent:Do Not Fund
How many machines are we talking about here? This seems to be working against the Seamless approach to IT IMHO.

General Software

Submitted by: Alan Kuutilla
Imprudent:Do Not Fund
This request could be in the second go around at mid year.

Submitted by: John Dickerson
Questionable:Fund Partially
I don't know that the approval mechanism for mid-year purchases is so onerous as to prevent reasonable requests
from being addressed. Besides, the whole idea is to bring purchases out in open.

Submitted by: Josh Klesel
Imprudent:Do Not Fund
I don't think this really fits well in the new EFTF model. I am mostly concerned with the dollar amount. But, if you
lower the dollar amount any further, this becomes pointless. Why are no other departments asking for this?

Submitted by: Steven Kovarik
Opportune:Fund as Available
All of this software needs to be brought to the group for appropriateness.

Submitted by: Chris McCoy
Questionable:Fund Partially
Not sure how to approach this. We do need some mechanism within the college to allow some flexibility. However, we
also need some accountability mechanism -- it’s not acceptable to just buy whatever for any reason whatsoever. The purpose of EFTF funds is to enhance the educational experience for students in an organized fashion.

Submitted by: Don Schlagell  
Questionable: Fund Partially  
Bring it to an ECRT meeting. If it is reasonable I’m sure it will be allowed.

**GT-Power**

Submitted by: Chris McCoy, Don Schlagell, Steven Kovarik, John Dickerson  
Important: Fund as Appropriate  
Routine software. Fund as is.

**Key Server**

Submitted by: Chris McCoy  
Opportune: Fund as Available  
We have three requests for key server. It’s time to examine combining these together.

Submitted by: Don Schlagell  
Opportune: Fund as Available  
I would like to see more seats of this and a central server for the college to use.

Submitted by: John Dickerson  
Questionable: Fund Partially  
Doesn’t this overlap with the keyserver purchase that CCEE is seeking? We should be purchasing one solution for the college if we’re going to go that route.

Submitted by: Steven Kovarik  
Opportune: Fund as Available  
Not sure of overall use with Adobe products not using it.

**Log-Me In**

Submitted by: Chris McCoy  
Imprudent: Do Not Fund  
What’s wrong with existing services?

Submitted by: Hap Steed  
Important: Fund as Appropriate  
ME has tried several remote services over the years. PC Anywhere, Remote Desktop, Net Support. This product, LogMeIn is superior to all the products tried. It is much more granular, has many more options, allows for multiple monitors, time out options, the list goes on and on. Anyone who has tried it will never go back to the vanilla products offered by the Windows operating system. It is only used by the system administrators for off campus remote access to critical machines like print server, system administrators units, data storage units. At $250.00 for 5 seats it is the best deal out there.

Submitted by: Josh Klesel  
Imprudent: Do Not Fund  
Windows remote desktop works just fine.

Submitted by: John Dickerson  
Imprudent: Do Not Fund  
It seems like an administrative tool. Not sure how it benefits students.
Submitted by: Steven Kovarik
Imprudent: Do Not Fund
Why this software. You can use remote desktop for this use.

Submitted by: Don Schlagell
Questionable: Fund Partially
What's wrong with remote desktop for windows? Or Rdesktop on linux?

**McAfee Desktop Firewall**

Submitted by: John Dickerson
Questionable: Fund Partially
I agree that firewall software is important, but selection of a good firewall tool should be studied by the entire college.

Submitted by: Chris McCoy
Questionable: Fund Partially
This needs to be examined again.

Submitted by: Steven Kovarik
Imprudent: Do Not Fund
Windows firewall.

Submitted by: Don Schlagell
Questionable: Fund Partially
This kind of thing should be addressed with IPSEC. Much more configurable, and included in the base windows installation. Some work has been done in ECSS to work toward a usable set of IPSEC rules.

Submitted by: Josh Klesel
Imprudent: Do Not Fund
There is a free version of this with windows. If that is not enough control, IPSec is far better at controlling windows computers.

**Netcam Watcher Software**

Submitted by: Steven Kovarik
Opportune: Fund as Available
Should look at this college central for an overall coverage

Submitted by: Chris McCoy
Questionable: Fund Partially
It's time to combine requests from several departments into an overall plan. If EFTF is going to fund a solution, we all should agree and have a long-term strategy for hardware and software.

Submitted by: Josh Klesel
Imprudent: Do Not Fund
Should be in the capital project.

Submitted by: Don Schlagell
Questionable: Fund Partially
Combine with other camera stuff into capital project for college.

**Space Guard**

Submitted by: Chris McCoy
Imprudent: Do Not Fund
Why not use existing quota tools and systems that fit within the existing model?

Submitted by: Don Schlagell
Questionable: Fund Partially
How much ME student data is not stored on central Linux servers? Seems to me the trend should be a move toward centralization. The SAN will have built in quota management.
Submitted by: Hap Steed  
**Important:** Fund as Appropriate  
This product allows for data quotas down to the directory and folder level. The quota system in Windows Server does not allow this. All student home directories are on the college server. This data storage is for special class data and special class projects stored on units in the ME department.

Submitted by: John Dickerson  
**Imprudent:** Do Not Fund  
If we get the NAS/SAN system, there will be a much greatly reduced need for departments to manage their own separate storage.

Submitted by: Steven Kovarik  
**Imprudent:** Do Not Fund  
Windows 2003 servers have a disk quota system. This is a questionable area.

**SPIP**

Submitted by: Don Schlagell  
**Questionable:** Fund Partially  
What is it used for? Is there something the current version cannot do? Is the current version going to stop working?

Submitted by: Steven Kovarik  
**Important:** Fund as Appropriate  
Class appropriate

Submitted by: Chris McCoy  
**Questionable:** Fund Partially  
Some additional information would be nice for such a pricey upgrade. If this is core and needed, then fund as is.

Submitted by: John Dickerson  
**Opportune:** Fund as Available  
This sounds like a useful tool, but it's pretty expensive for such a small group of users. What lab is this for? Are there others in the college who can benefit from this?

**Veritas Backup**

Submitted by: John Dickerson  
**Questionable:** Fund Partially  
If we get the NAS/SAN system, there will be a much greatly reduced need for separate storage for student data. The NAS/SAN system will have a built-in data backup and archival mechanism.

Submitted by: Chris McCoy  
**Questionable:** Fund Partially  
We need to examine our college-wide backup strategy to determine where and how to make the transition to a SAN/NAS and different backups systems. Legato software is expensive.

Submitted by: Don Schlagell  
**Questionable:** Fund Partially  
How much student data is housed on non-central servers that are not being covered by Legato? Seems like this should be consolidated and the SAN will require new strategies to be embraced.

Submitted by: John Dickerson  
**Questionable:** Fund Partially  
If we get the NAS/SAN system, there will be a much greatly reduced need for separate storage for student data. The NAS/SAN system will have a built-in data backup and archival mechanism.

Submitted by: Steven Kovarik  
**Opportune:** Fund as Available  
We need to look at overall backup scheme across the college.
Proposer: Chris McCoy  
Status: Approved (as outlined below)  
Requested Funding: $9,000  
Total Awarded: $9,000

<table>
<thead>
<tr>
<th>Package/Description</th>
<th>Proposed</th>
<th>Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legato Networker</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description: Backup software for college-wide file servers. This is a portion of the total cost -- ECSS cost-shares this 50%. If the college-wide SAN is purchased, it's likely that this product will no longer need to be purchased.</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Recurring Costs: 5000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses: Not used for any course, but used for all storage servers for all students in the college.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope of Use: College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>License Size: Limited to a specific number of servers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term: Annual Maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eCRT Panel Restrictions: SAN disaster recovery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECRT RECOMMENDATION: Critical:Fund Now</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VMware Virtual Infrastructure Basic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description: Upgrade the existing VMware host to VMware Virtual Infrastructure Basic, which includes ESX Server 3.0 and support. Also, install and run VirtualCenter for VMware Server to help manage virtual machines. In order to make the best use of hardware resou</td>
<td>$4,000</td>
<td>$4,000</td>
</tr>
<tr>
<td>Recurring Costs: 1000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses: This provides general service infrastructure. See &quot;Description&quot; for more information.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope of Use: College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>License Size: College Unlimited</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term: Upgrade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eCRT Panel Restrictions: Slightly less than critical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECRT RECOMMENDATION: Critical:Fund Now</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ECSS: eCRT Review Panel Comments

**Legato Networker**

Submitted by: John Dickerson  
Questionable: Fund Partially  
As in the other comment regarding Legato, we will probably need to change our backup strategies dramatically if we get the NAS/SAN system. We will probably continue to use Legato Networker, but the number and types of systems we back up will probably change. I recommend reserving the amount listed but plan to work toward consolidating backups as much as feasible.

Submitted by: Don Schlagell  
Important: Fund as Appropriate  
If needed after the SAN, by all means keep this. I have some faculty researchers who have have bought into this as their backup system for their servers (ICD). Taking the service away from them would be a shame.

Submitted by: Hap Steed  
Opportune: Fund as Available  
A bit pricy for a maintenance product. Have you tried Veritas Backup Exec. I think you can buy the entire package for this price. Maintenance will be less.

Submitted by: Chris McCoy  
Opportune: Fund as Available  
We need to examine our college-wide backup strategy to determine where and how to make the transition to a SAN/NAS and different backups systems. Legato software is expensive.

Submitted by: Steven Kovarik  
Opportune: Fund as Available  
Look across the college as to what is appropriate.

**VMware Virtual Infrastructure Basic**

Submitted by: Steven Kovarik  
Important: Fund as Appropriate  
This is appropriate as used for EFTF. We need to be careful as using this only for class purposes.

Submitted by: John Dickerson  
Important: Fund as Appropriate  
While this may seem expensive, it is actually a good way to help maximize the use of hardware by using existing server hardware more efficiently and giving us more flexibilty. This should be funded.

Submitted by: Don Schlagell  
Important: Fund as Appropriate  
I think this is a good idea. The virtualization of some low overhead servers to maximize use is always a good thing IMHO.

Submitted by: Chris McCoy  
Opportune: Fund as Available  
The basic reason for the upgrade is sound. Is this the right time? Is this the right solution to invest in?
Proposer: Chris McCoy  
Status: Approved (as outlined below)  
Requested Funding: $21,900  
Total Awarded: $9,450

<table>
<thead>
<tr>
<th>Package/Description</th>
<th>Proposed</th>
<th>Awarded</th>
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</thead>
<tbody>
<tr>
<td><strong>Keyserver</strong></td>
<td>$9,450</td>
<td>$9,450</td>
</tr>
<tr>
<td>Description:</td>
<td>college wide keyserver installation</td>
<td></td>
</tr>
<tr>
<td>Recurring Costs:</td>
<td>$2,250</td>
<td></td>
</tr>
<tr>
<td>Courses:</td>
<td>cost for 1000 seats</td>
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</tr>
<tr>
<td>Scope of Use:</td>
<td>College</td>
<td></td>
</tr>
<tr>
<td>License Size:</td>
<td>College Unlimited</td>
<td></td>
</tr>
<tr>
<td>Term:</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>eCRT Panel Restrictions:</td>
<td>Investigate Macrovision for FlexLM. If not funded at the college level funding is needed for departments who currently use Keyserver.</td>
<td></td>
</tr>
<tr>
<td>ECRT RECOMMENDATION:</td>
<td>Opportune:Fund as Available</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>HEAT</strong></th>
<th>$5,400</th>
<th>$0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Trouble ticket software</td>
<td></td>
</tr>
<tr>
<td>Recurring Costs:</td>
<td>5400</td>
<td></td>
</tr>
<tr>
<td>Courses:</td>
<td>All</td>
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<td>Scope of Use:</td>
<td>College</td>
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<tr>
<td>License Size:</td>
<td>3 concurrent seats</td>
<td></td>
</tr>
<tr>
<td>Term:</td>
<td>New</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Maple</strong></th>
<th>$3,000</th>
<th>$0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Symbolic Math program</td>
<td></td>
</tr>
<tr>
<td>Recurring Costs:</td>
<td>3000</td>
<td></td>
</tr>
<tr>
<td>Courses:</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Scope of Use:</td>
<td>College share of univ lic $9k</td>
<td></td>
</tr>
<tr>
<td>License Size:</td>
<td>College Unlimited</td>
<td></td>
</tr>
<tr>
<td>Term:</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>ECRT RECOMMENDATION:</td>
<td>Critical:Fund Now</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Matlab (for Students)</strong></th>
<th>$25,000</th>
<th>$0(CAC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>The &quot;Student Matlab License&quot; provides for unlimited downloads and access for any student (and only students) at ISU for a period of one year. The quote provides for some 20 identified toolboxes to be included with the base product.</td>
<td></td>
</tr>
<tr>
<td>Recurring Costs:</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>Courses:</td>
<td>Any engineering student and for any courses. Currently, Matlab is heavily used in the AERE, ME, MSE, and ECPE curricula. ABE is quickly adopting Matlab as the preferred programming environment of choice. Several other departments have expressed strong interest.</td>
<td></td>
</tr>
<tr>
<td>Scope of Use:</td>
<td>University</td>
<td></td>
</tr>
<tr>
<td>License Size:</td>
<td>University Unlimited</td>
<td></td>
</tr>
<tr>
<td>Term:</td>
<td>Annual Maintenance</td>
<td></td>
</tr>
<tr>
<td>ECRT RECOMMENDATION:</td>
<td>Opportune: Fund as Available</td>
<td></td>
</tr>
<tr>
<td>ECRT RESTRICTIONS:</td>
<td>Fund only if CAC proposal is funded</td>
<td></td>
</tr>
</tbody>
</table>
College: eCRT Review Panel Comments

**HEAT**

Submitted by: John Dickerson  
Imprudent: Do Not Fund  
I don't think students should have to pay for the software we use to keep track of problems. HEAT (if paid for at all) should be an overhead or administrative cost.

Submitted by: Josh Klesel  
Imprudent: Do Not Fund  
We, as a college, have not decided on HEAT yet.

Submitted by: Don Schlagel  
Imprudent: Do Not Fund  
No decisions have been made on the "gold" standard for trouble ticket software from what I understand. Until that time, why buy it?

Submitted by: Jim Wellman  
Opportune: Fund as Available  
Funds should be made available if our trial determines it to be worth the investment.

Submitted by: Hap Steed  
Imprudent: Do Not Fund  
Are we going to buy into Durham's HEAT operation?? If so we donot need to have individual operations.

Submitted by: Chris McCoy  
Questionable: Fund Partially  
The college had not yet decided on HEAT as THE trouble-ticket system. If and when this is done, it should be a coordinated effort across all departments. Also, since this will be used for non-academic work, it should be subsidized by departmental funds.

Submitted by: Steven Kovarik  
Imprudent: Do Not Fund  
Not working in our situation

**Keyserver**

Submitted by: Mike Renze  
Questionable: Fund Partially  
What benefits does keyserver offer the COE?

Submitted by: Steven Kovarik  
Opportune: Fund as Available  
Not necessary in all instances.

Submitted by: John Dickerson  
Opportune: Fund as Available  
Do we know what the overall benefits we will get from this? One presumes we're using this as a way to avoid purchasing extra licenses while making them more available across the college. Do you have any reasonable cost savings this will bring? Do you have a list of applications we in use in the College that can be licensed with this?

Submitted by: Don Schlagell  
Opportune: Fund as Available  
This would be a nice utility to have simply on the basis of its data collection capabilities. We would have a much better idea of our actual utilization in the labs with it.
Software Portfolio Proposal, FY08  
92  
8/27/2007

Submitted by: Chris McCoy  
Opportune: Fund as Available  
Last year we discussed implementing keyserver college-wide. We need to examine the timing of this to determine if FY2008 is the best time to do this. CCEE, ME, and IMSE all use the product -- why not use it college-wide if it's "needed"?

Maple

Submitted by: Steven Kovarik  
Opportune: Fund as Available  
Maple is available in Matlab. What extra functionality is needed.

Submitted by: Jim Wellman  
Important: Fund as Appropriate  
required for courses. Have yet to be billed for this software but expect it this year.

Submitted by: Josh Klesel, Don Schlagell  
Important: Fund as Appropriate  
Seems appropriate

Submitted by: Hap Steed  
Opportune: Fund as Available  
Seems reasonable. What department use this software?

Submitted by: John Dickerson  
Important: Fund as Appropriate  
Isn't this included in the Off-the-Top software?

Submitted by: Chris McCoy  
Important: Fund as Appropriate  
This should be included in the college-wide portfolio.
Proposer: Diane Rover/Loren Zachary
Status: Not Approved
Requested Funding: $8,500
Total Awarded: $0

<table>
<thead>
<tr>
<th>Package/Description</th>
<th>Proposed</th>
<th>Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduation Planner</td>
<td>$8,500</td>
<td>$0</td>
</tr>
</tbody>
</table>

Description: Tool used by students & advisors to plan for courses required for graduation.
Recurring Costs: 8500
Courses: None.
Scope of Use: University
License Size: University Unlimited
Term: Annual Maintenance
eCRT Panel Restrictions: Administrative tool/application
ECRT RECOMMENDATION: Inappropriate: Fund Elsewhere
ENGR ADMIN: eCRT Review Panel Comments

Graduation Planner

Submitted by: Steven Kovarik
  Important: Fund as Appropriate
  Student appropriate.

Submitted by: John Dickerson
  Critical: Fund Now
  This is tool that will benefit every student in the college and allow departments and engineering administration to achieve greater consistency with graduation planning. This should be funded.

Submitted by: Josh Klesel
  Questionable: Fund Partially
  Perhaps this could be a 50/50 split since it is used by administration and students?
## Capital Projects: Summary of Recommendations

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<th>EFTF</th>
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*Imprudent: Do Not Fund*

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*Inappropriate: Fund Elsewhere*
EFTF Committee

Committee Recommendation
Loren Zachary, Assistant Dean
To be completed

EFTF Committee

Committee Recommendation
Loren Zachary, Assistant Dean
To be completed

eCRT Review Panel

Panel Recommendation:
The multi-year plan estimated that capital project proposals for FY2008 would be $1,000,000. The eCRT panel is recommending funding of no more than $864,261 for FY2008.

Many proposals this year included requests for general engineering lab equipment, many electronic in nature, but not computers per se. Obviously engineering lab equipment is important and needed, but such requests could easily consume all EFTF funds without meeting any computational needs.

Several labs are recommended to be extended for warranty in order to keep the budget reasonable this year. Before funding non-computing needs, eCRT recommends funding of new equipment in these labs first. Requests for new equipment put off until next year will be significant for facilities in CCEE ($150,000), ECPE ($200,000), CBE ($90,000), MSE ($35,000), and ECSS ($75,000). With approximately $1.9 million in lab computers, the 3-year cyclical requirement is approximately $650,000 for just computers – not including printers and other computer-related lab equipment.

The following are some specific issues which require further scrutiny by EFTF:

1. 3-D Printers (AERE). How do CNC devices fit within EFTF? They require a computer image to generate and are really just 3-D printers, but they are also engineering equipment and are expensive.
2. Computers for instructors. Departments should be funding computers for instructors, except where the computer is a fixed part of a lab.
3. A/V equipment. A significant increase in A/V equipment (LD panels, projectors, DVD players, etc.) was seen this year. While this equipment is certainly beneficial, it is unclear that it is appropriate for EFTF.
4. Many proposals stretch the boundaries of traditional EFTF guidelines and need reviewed.

Some general comments about implementation plans and expectations:

- All computers and printers will be ordered in bulk according to a small number of similar models.
- All funded labs will be accessible to all engineering students, except for issues of safety and security.
- All computers will share the same build, except where special-purpose lab software is required.
- The "ME Media Center" is proposed to become the "South Zone Media Center" to service ME, IMSE, MSE, and AERE students. If successful, a "North Zone Media Center" will be proposed next year.

Additional Comments

Additional comments for Capital Project Proposals can be found in the eCRT, EFTF and Dean's meeting minutes (Appendices attached).
Proposer: Josh Klesel
Department: CCEE
Status: Approved (conditions as outlined below)
Requested Funding: $23,350
Total Awarded: $10,150

**Start Date:** 6/1/2007  
**End Date:** 6/30/2007

**Project Description:** Place new computing equipment into 194 Town Engineering. In this room is a large open space with a large LCD screen and computer so that industry and departmental news can be shown to students, as well as for presentations. There are also two extra breakout rooms with projectors in this room.

**Rationale:** This a recently refurbished room that has been turned into a student work area. Part of the construction has been payed for by industry.

**Proposed Solution:**
- 4 lab computers - 1500 x 4 = $6,000
- 1 computer for display - $1,100
- 1 printer (B&W) - $1,500
- 1 printer (color) - $1,500
- 1 scanner - $150
- 2 projectors for group breakout rooms - $7,500
- 4 security cameras - $1,600
- 1 LCD display and cables - $4,000

**Seamless IT Compliance:** These facilities are available to all engineering students

**Impact to Education:** This will be one more area for CCEE and other COE students to be able to study, and work in teams on course related work.

**eCRT Restrictions:** Move security cameras to shared project. Reduce cost of projectors to $2400. Ask department to cover LCD display & computer. Reduce to one color printer.

**TOTAL PROPOSED** $23,350

**TOTAL AWARDED** $10,150

**Conditions:**
Move security cameras to shared capital project. Reduce cost of projectors to $2400. Ask department to cover LCD display and computer. Reduce to one color printer.
**194 Town Engineering: eCRT Review Panel Comments**

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $10,150

Restrictions:
Move security cameras to shared project. Reduce cost of projectors to $2400. Ask department to cover LCD display & computer. Reduce to one color printer.

**Reviewer: Steven Kovarik**
Seems like a lot for 1 area. Will be nice when finished. Why 2 printers for 4 machines. Would look at one or the other but not both. What is the LCD panel being used for since you have the breakout rooms with projectors for presentation space.

**Reviewer: Chris McCoy**
There is a lot of high-cost items in this proposal. It seems strange to include both a color and black-white printer in a space that only has 4 computers. Projectors also seem to be high-end ($3250/ea).

If this room will truly be available to all engineering students, then it could be a very nice study/project space, once one gets over the sticker shock of the components.

**Reviewer: Alan Kuutilla**
Nice setup, but I believe prices could be lowered.

**Reviewer: John Dickerson**
Town lacks this type of facility. It is needed.

**Reviewer: Jim Wellman**
We have been happy with our NEC 676E projectors which were $850/unit.

**Reviewer: Alan Kuutilla**
Kind of restricted for all COE students.

**Reviewer: Hap Steed**
A lot of equipment for such a small group of students units. Is this an open lat open to entire college. Will this be used by department as conference room? Should this be split funding with department? 50-50
Proposer: Josh Klesel  
Department: CCEE  
Status: Approved (conditions as outlined below)  
Requested Funding: $16,500  
Total Awarded: $14,200

Start Date: 7/2/2007  
End Date: 7/31/2007

Project Description: Outfit room 196 with new equipment after a remodel of the room. This room was remodeled with tuition surcharge funds. That proposal assumed EFTF coverage for equipment to furnish the room.  
Rationale: This will be a departmental classroom, specifically for CE 453 Highway Design.

Proposed Solution:
7 workstations - 7 @ $1500 = $10,500
1 instructor computer - $1100
1 wireless keyboard and mouse - $250
1 smart pad? for annotating notes on power points - $250?
1 projector and ceiling mount $3500
1 projector screen $200
1 16 port network switch $275
Network cables - $100
Audio system - $260

Seamless IT Compliance: These facilities are available to all engineering students  
Impact to Education: use for classroom - relieves pressure on other labs in the department.

eCRT Restrictions: Buy a lower-cost projector (ISU standard). Installation can not be funded.

TOTAL PROPOSED $16,500

TOTAL AWARDED $14,200

Conditions:
Purchase a lower-cost projector (ISU standard). Installation can not be funded.
196 Town Engineering: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $14,200

Restrictions:

- Buy a lower-cost projector (ISU standard). Installation can not be funded.

**Reviewer: Chris McCoy**
Since this room was remodelled as part of the tuition surcharge funds, it needs to be completed by EFTF funds. Perhaps some concessions on equipment could be made, but the original proposal assumed funding to this level.

**Reviewer: Steven Kovarik**
Looks like the room would be unusable without the appropriate computing.

**Reviewer: Don Schlagel**
fulfilling obligations... diff. tuition made the room; we outfit it.

**Reviewer: John Dickerson**
The teaching/presentation facilities in Town are badly in need of an upgrade.

**Reviewer: Jim Wellman**
Consider NEC VT676E projector
ABE TEACHING/OPEN COMPUTING LAB IN 10A I ED II FY08

Proposer: Raj Raman / Alan Kuuttila
Department: ABE
Status: Approved (conditions as outlined below)
Requested Funding: $37,500
Total Awarded: $35,800

Start Date: 7/1/2007
End Date: 8/24/2007
Project Description: Replace 29 existing out-of-warranty desktop computers in 10A I ED II with 25 mid-level desktops.
Rationale: To upgrade 25 computers in a teaching/open computing lab. This room is used to teach TSM340, TSM440, and TSM540 - which are all CAD intensive courses. As an open lab, this room is also heavily used by students doing CAD and other computationally intensive projects.
Proposed Solution: Replace five- and three-year old Dell computers to CAD software for both classes and open labs.
Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: Enable CAD-based classes to run up-to-date software (hard to do with 3+ year old machines). Enable all COE student users of open lab to run on up-to-date SW.

eCRT Restrictions: Standard config w/ single monitor. Common access.

TOTAL PROPOSED $37,500

TOTAL AWARDED $35,800

Conditions:
Use CoE standard configuration with single monitor; common access.
ABE Teaching/Open Computing lab in 10A I ED II: eCRT Review Panel Comments

eCRT Panel Summary:
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $ 35,800

Restrictions:
Standard config w/ single monitor. Common access.

Reviewer: Chris McCoy
Restrictions
Allocation should be closer to $33,000 for budget purposes. System should be part of a bulk buy across the college.
Comments
The request is reasonable, although the estimate is high. Should be closer to $33,000.

Reviewer: John Dickerson
The machines in that lab could use an upgrade.

Reviewer: Jim Wellman
seems reasonable

Reviewer: Steven Kovarik
Would make sure that we are configuring all machines appropriately for their use. Work with eCRT group to find appropriate systems so we can get like configured machines across the college.

Reviewer: Don Schlagel
Estimate seems high. I would suggest that all general purpose lab proposals be recalculated using a "template" system estimate from Dell to achieve consistent numbers. Printer replacement proposals would benefit from a similar plan.
Proposer: Steven Kovarik  
Department: ECPE  
Status: Approved (conditions as outlined below)  
Requested Funding: $12,000  
Total Awarded: $600  

Start Date: 7/2/2007  
End Date: 10/31/2007  
Project Description: Replacement of current computers that are out of warranty.  
Rationale: Systems are currently out of warranty.  
Proposed Solution: Replace systems with IT approved systems.  
Seamless IT Compliance: These facilities are available to all engineering students  
Impact to Education: Open lab environment available to all engineering college students. Used mainly for Power engineering tools including PSS/E and ETAPS but also have all open lab software installed and available to all students.  

eCRT Restrictions: Extend warranty.  

TOTAL PROPOSED
$12,000  

TOTAL AWARDED
$600  

Conditions:  
Extend warranty
Coover 1125 Computer Upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $ 600

Restrictions:
- Extend warranty.

**Reviewer: Don Schlagel**
I would suggest once again that an acceptable "template" configuration be defined and adhered to to make cost estimates more consistent across labs.

**Reviewer: Chris McCoy**
I'd like to see greater explanation than simply "these machines are three years old". There is no way to determine if the existing equipment meets the needs or not and what the needs are.

**Reviewer: Jim Wellman, Alan Kuutila**
seems appropriate

**Reviewer: John Dickerson**
The age of the equipment doesn't make this a critical upgrade. Should be lower in priority than some other needed upgrades.
Proposer: Steven Kovairk  
Department: ECPE  
Status: Approved (conditions as outlined below)  
Requested Funding: $16,500  
Total Awarded: $16,500

Start Date: 7/2/2007  
End Date: 10/31/2007  
Project Description: Computers in this lab used for advanced embedded systems. The systems currently in this lab are out of warrantee.  
Rationale: The systems are out of warrantee and need replacement.  
Proposed Solution: Work with engineering IT staff to come up with best solution for like machines that could be used in this and other labs.  
Seamless IT Compliance: Semi restricted, all engineering users can access when labs not in use by classes.  
Impact to Education: The systems are for Embedded systems and often are used for simulation of those embedded systems. Faster more reliable machines are needed. The systems are open to other students when the labs are not in use by classes.

eCRT Restrictions: For 11 systems using standard configuration and standard access.

TOTAL PROPOSED $16,500

TOTAL AWARDED $16,500

Conditions:  
Use CoE standard configuration for 11 systems; common access.
Coover 1207 Computer Upgrade: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $16,500

Restrictions:

- For 11 systems using standard configuration and standard access.

*Reviewer: Don Schlagel*
IT staff should ensure a machine configuration that is consistent with the need.

*Reviewer: John Dickerson*
The age of the equipment in this lab is not specified. Considering that we can't afford to fund all requested upgrades, what is the priority of this upgrade versus others requested for the department?

*Reviewer: Jim Wellman, Alan Kuutila*
Seems appropriate
**COOVER 1301 COMPUTER AND PRINTER UPGRADE**

Proposer: Steven Kovarik  
Department: ECPE  
Status: Approved (conditions as outlined below)  
Requested Funding: $22,500  
Total Awarded: $22,500

Start Date:  7/2/2007  
End Date:  10/31/2007  
Project Description: Replacement of Systems and printer in lab.  
Rationale: Systems in lab are out of warrantee and have been for 1 year. The department held off for an additional year as it looked like the upgrades could wait. This seemed to work in this lab.  
Proposed Solution: I would look to try to go with a 4 year warrantee to see if machines in this lab could be extended to a 4 year renewal as 3 years may be too short. IT staff computer solution used here.  
Seamless IT Compliance: all engineering students when labs are not in use  
Impact to Education: These computers are used in a varity of classes including EE/CPrE 185/186/211 in which the lab is booked most of the day. When the lab is not in use, it is available to all engineering students.

**eCRT Restrictions:** Use college standard, common access.

**TOTAL PROPOSED**  
$22,500

**TOTAL AWARDED**  
$22,500

Conditions:  
Use CoE standard configuration; common access.
Coover 1301 Computer and printer Upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $22,500

Restrictions:
- Use college standard, common access.

**Reviewer: John Dickerson**
This is a worthy project. It would be nice to know what priority the department would give this compared to other projects in the proposal.

**Reviewer: Chris McCoy**
- Computers are ancient.

**Reviewer: Don Schlagel**
These machines need to be replaced.
Proposer: Steven Kovarik  
Department: ECPE  
Status: Approved (conditions as outlined below)  
Requested Funding: $27,000  
Total Awarded: $27,000

Start Date: 7/2/2007  
End Date: 10/31/2007

Project Description: Upgrade of 18 computers. This lab computers were supplied by industry grant from IBM, Lockheed Martin and Rockwell Collins. The computers are out of warranty. The main use of these computers will be for Computer Engineering class labs but are also available to the college of engineering students when not in use for class purposes.

Rationale: Systems are out of warranty.

Proposed Solution: Replace systems with IT staff approved computer solution.

Seamless IT Compliance: All engineering students when labs are not in use for classes.

Impact to Education: Systems are needed for new software engineering software lab. When the lab is not in use by classes, all engineering students can utilize systems.

eCRT Restrictions: Use standard configuration and access.

TOTAL PROPOSED $27,000

TOTAL AWARDED $27,000

Conditions: Use CoE standard configuration; common access.
Coover 2205 Computer Upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $ 27,000

Restrictions:
- Use standard configuration and access.

**Reviewer: Don Schlagell, Alan Kuutilla**
Seems appropriate

**Reviewer: John Dickerson**
The age of the equipment is not specified. I suspect that software engineering assignments may not require high performance systems. Considering the demand for funding this year, it would nice to know the priority of this upgrade relative to other department lab upgrade proposals.

**Reviewer: Chris McCoy**
I'd like to see greater explanation than simply "these machines are three years old". There is no way to determine if the existing equipment meets the needs or not and what the needs are.
Proposer: Steven Kovarik  
Department: ECPE  
Status: Not Approved (conditions as outlined below)  
Requested Funding: $6,000  
Total Awarded: $0

**Start Date:** 7/2/2007  
**End Date:** 10/31/2007  
**Project Description:** Replacement for Pendubot computers which are currently 8 or more years old. They have not been replaced until now due to the computers having 3 ISA slot cards to run the Pendubot trainers. There is now a solution using a DAQ board donated by National Instruments. We are requesting that the computers now be upgraded to take advantage of the donation.

Replacement of computers related to conveyor system trainers is also being requested. The systems used on these trainers are both 5+ years old and are due for a complete replacement. We have held off on this cycle as the systems are used minimally but still require something that is better than what is currently being used. Troubles in the past with computer hardware has deemed this computer replacement a must.

**Rationale:** Current computers and boards for the pendubot systems are completely out of date still using ISA cards. The pendubot systems are being updated with DAQ connection cards donated by National Instruments. There is then a need for faster hardware to accommodate the NI Labview and DAQ cards to make the current pendubot systems work.

Computers for the conveyor systems trainers are the only thing that will need to be replaced as the trainers are still functional and usable.

**Proposed Solution:** Replace computers that will be fast enough to run the DAQ boards and NI software.

**Seamless IT Compliance:** The systems are used in the EE controls program and have not been replaced due to hardware issues with ISA boards. We currently have a National Instruments partner that will help to develope the controls sequence to current practices which will help in the overall classes to get the theory and working practice to come together.

**eCRT Restrictions:** Recycle old equipment (less than 3 years old from general pool).

**TOTAL PROPOSED**  
$6,000

**TOTAL AWARDED**  
$0

**Conditions:**  
Use recycled equipment
Coover 3201 Computer Upgrades: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $

Restrictions:
- Recycle old equipment (less than 3 years old from general pool).

*Reviewer: Chris McCoy*
  Good explanation.

*Reviewer: Don Schlagel*
  We should take advantage of the donation by Natl. Instruments.

*Reviewer: Alan Kuutila*
  ok

*Reviewer: John Dickerson*
  Sounds like the donation is a good opportunity and this is a relatively low cost.
Proposer: Steven Kovarik  
Department: ECPE  
Status: Approved (conditions as outlined below)  
Requested Funding: $9,000  
Total Awarded: $9,000

| **Start Date:** | 7/2/2007 |
| **End Date:** | 10/31/2007 |

**Project Description:** 10 machines used for Forensics. The machines are dedicated due to the cost of software. They are remote access machines and will not need displays.

**Rationale:** The current machines are out of warrantee. The systems in this monitor less remote access lab are utilized by a large (50+) students per semester utilizing forensics software. The machines are currently restricted to only students within the class as the software is expensive per seat and there are approx 80 hours of homework given that requires the software to be used. Each student is given a time slot on the machines which he can logon to do their homework.

**Proposed Solution:** Purchase just machines and not displays. IT staff approved machines for this use.

**Seamless IT Compliance:** These facilities are restricted

**Impact to Education:** See above.

**eCRT Restrictions:** Investigate VMWare solution first, buy desktops if virtual solution is not workable.

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**TOTAL PROPOSED**

$9,000

**TOTAL AWARDED**

$9,000

**Conditions:** Investigate VMWare solution first, buy desktops if virtual solution is not workable. Use CoE standard configuration; common access.
Coover 3223 Computer Upgrade: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Critical: Fund Now  
Funding Recommendation: $ 9,000

Restrictions:
  
  Investigate VMWare solution first, buy desktops if virtual solution is not workable.

*Reviewer: Don Schlagell*
  
  Out of warranty and needed equipment.

*Reviewer: Chris McCoy*
  
  What type of equipment? How does one determine sizing, etc?

*Reviewer: John Dickerson*
  
  Sounds like a natural for a virtualization approach. I suspect computer forensics doesn't require high performance. A virtual server could be more cost effective and more flexible.
# COOVER SENIOR DESIGN LAPTOP UPGRADE

Proposer: Steven Kovarik  
Department: ECPE  
Status: Approved (conditions as outlined below)  
Requested Funding: $ 1,700  
Total Awarded: $1,100

| Start Date: | 7/2/2007 |
| End Date: | 10/31/2007 |

**Project Description:** Proposal to upgrade the Senior Design laptop, current laptop is a Dell c800 that is out of warranty.

**Rationale:** Senior Design often uses a laptop for student presentations, faculty and visiting lecturer presentations and projects that require remote data gathering. The current laptop is out of warranty and needs to be Upgraded.

**Proposed Solution:** Purchase a laptop within specifications of recent projects. Most likely High graphics, 2 gig memory and 80 Gig drive.

**Seamless IT Compliance:** These facilities are restricted

**Impact to Education:** All Senior Design students in ECpE will benefit over a 3 year period as they will give reviews, presentations and see lectures given with these facilities.

**eCRT Restrictions:** Use standard configuration.

| TOTAL PROPOSED | $1,700 |
| TOTAL AWARDED | $1,100 |

**Conditions:**
Use CoE standard configuration; common access.
Coover Senior Design Laptop Upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $ 1,100

Restrictions:
  - Use standard configuration.

**Reviewer:** Chris McCoy, John Dickerson, Don Schlagell
  - Seems appropriate and timely.
Proposer: Steven Kovarik
Department: ECPE
Status: Not Approved (conditions as outlined below)
Requested Funding: $18,148
Total Awarded: $0

**Start Date:** 7/2/2007  
**End Date:** 10/31/2007

**Project Description:** ECpE currently has 2, 6 year old Sun quad core systems that are out of warrantee and very slow. We are looking to replace one system this year and another system next year.

**Rationale:** System is used for high speed simulations of VLSI designs and also for longer running Matlab simulations. The systems that are currently in place are very old and causing issues on our network thus replacement is needed.

**Proposed Solution:** Upgrade to a PowerEdge 6950 dual core AMD Opteron dual core 2.8 GHz system with 32 Gig Ram. Drive size is relative low by todays standards as only /local storage is needed for local simulations space.

This system will also fit well into the clustering or Grid software that is being looked into closely. When the system is put on line we would look to making sure that the grid would help with the overall use of this system if appropriate.

**Seamless IT Compliance:** These facilities are available to all engineering students

**Impact to Education:** This system will be used mainly for high end computation and long running processes of ECpE department but will be available to all engineering students.

**eCRT Restrictions:** Fund as part of the ENGR Grid Phase I.

**TOTAL PROPOSED** $18,148

**TOTAL AWARDED** $0

**Conditions:**
Fund as part of the ENGR Grid Phase I
Coover Server Upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $

Restrictions:
- Fund as part of the ENGR Grid Phase I.

*Reviewer: Don Schlagel*
- seems like a good addition to the grid plans.

*Reviewer: Chris McCoy*

- **Restrictions**
  Coordinate with existing grid/cluster requests.

- **Comments**
  The equipment selected for this must be carefully chosen to fit within the grid and provide flexibility to the entire system. Should we realistically consider a larger cluster?

*Reviewer: Alan Kuutilla*
- Will this benefit the grid or will the grid solve this problem?

*Reviewer: John Dickerson*
- The Sun boxes definitely need to be replaced and there are no other systems in ECPE capable of doing large VLSI analyses.

  This project would be a good co-proposal with the grid proposal. That is, if this project was approved then the grid proposal expense costs could be reduced a corresponding amount.
### DAQ SYSTEM REPLACEMENT FY08

Proposer: Jim Wellman  
Department: AERE  
Status: Approved (conditions as outlined below)  
Requested Funding: $11,500  
Total Awarded: $11,500

| Start Date: | 6/30/2007 |
| End Date: | 8/1/2007 |
| **Project Description:** | Replace 2 systems used to collect data in lab courses  
ship date: 8/15/01  
Warranty exp: 8/15/06 |
| **Rationale:** | Systems are out of warranty and not meeting minimum requirements of applications |
| **Proposed Solution:** | Replace 2 systems and DAQ cards. DAQ cards to be replaced with NI CompactDAQ Chassis's and modules. |
| **Seamless IT Compliance:** | These facilities are restricted |
| **Impact to Education:** | Provides a key role in teaching AerE lab courses. |
| **eCRT Restrictions:** | Check with NI to determine if gifts can be arranged for new DAQ cards/modules. Consider using repurposed equipment and/or laptops. |

**TOTAL PROPOSED** $11,500

**TOTAL AWARDED** $11,500

**Conditions:**  
Check with National Instruments to determine if gifts can be arranged for new DAQ cards/modules. Consider using repurposed equipment and/or laptops.


**DAQ system replacement: eCRT Review Panel Comments**

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now  
Funding Recommendation: $11,500

Restrictions:

Check with NI to determine if gifts can be arranged for new DAQ cards/modules. Consider using repurposed equipment and/or laptops.

**Reviewer: Steven Kovarik**  
The cost of the systems seem high. What is the breakout of the computer and the DAQ cards. NI IEEE 488 cards are around $500 each. Would be good to know what is actually being purchased and if it is hardware or computing.

**Reviewer: John Dickerson**  
Sounds reasonable. What is the priority of this upgrade against other departmental upgrade requests?

**Reviewer: Chris McCoy**  
What's required to meet the needs? Could these systems be used from another source?
HOWE 2228 COMPUTER UPGRADE FY08

Proposer: Jim Wellman
Department: AERE
Status: Approved (conditions as outlined below)
Requested Funding: $38,000
Total Awarded: $28,500

Start Date: 6/1/2007
End Date: 7/31/2007
Project Description: Replace 19 desktop PCs
Move old systems to grad offices as needed
Rationale: Systems no longer meet minimum requirements of applications
Proposed Solution: Replace systems
Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: Open lab environment available to all engineering college students

TOTAL PROPOSED $38,000
TOTAL AWARDED $28,500

Conditions:
Coordinate with Howe 2332 and Hoover 2268. Use CoE standard configuration; common access.
Howe 2228 computer upgrade: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $28,500

Restrictions:

Needs to be coordinated with Howe 2332 and Hoover 2268. Use standard configuration and access.

**Reviewer: Alan Kuutilla**
Should follow college computing standards.

**Reviewer: John Dickerson**
It is time to upgrade those machines.

**Reviewer: Don Schlagel**
Configuration should be standardized.

**Reviewer: Chris McCoy**

*Restrictions*
If PC’s limit to same model as is common in a bulk purchase (~$25,000). If workstations, purchase similar to 2332 Howe (~$65,000).

*Comments*
The request is reasonable, although the estimate is on the high side.

There should be some discussion about moving the 2268 Hoover Linux-purposed lab to 2228. In this case, 2228 Howe should be outfitted with appropriate Workstation-class equipment (same as 2332?).

**Reviewer: Steven Kovarik**
Need to make sure that we are consulting the eCRT as to appropriate systems for this lab. $2000 may be appropriate without knowing its use.
Proposer: Jim Wellman  
Department: AERE  
Status: Approved (conditions as outlined below)  
Requested Funding: $10,000  
Total Awarded: $10,000

\[\text{Start Date:} \quad 6/30/2007\]
\[\text{End Date:} \quad 8/1/2007\]

**Project Description:** Upgrade A/V in room 2332 Howe for teaching. Hardware to transmit image from instructors station to second monitor of each workstation.

**Rationale:** Room will be used as the college's sole room for courses requiring Linux. Currently the room has no provisions for displaying course material.

**Proposed Solution:** Install DVI distribution system as specified by Matt Darbyshire (ITS)

**Seamless IT Compliance:** These facilities are available to all engineering students

**Impact to Education:** Linux teaching lab available to all engineering college students

**eCRT Restrictions:** Needs to be funded in order to accommodate multi-lab switch with Howe 2228 and Hoover 2268.

**TOTAL PROPOSED** $10,000

**TOTAL AWARDED** $10,000

**Conditions:**
Funding in coordination with multi-lab switch (Howe 2228 & Hoover 2268).
Howe 2332 A/V: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $ 10,000

Restrictions:

   Needs to be funded in order to accommodate multi-lab switch with Howe 2228 and Hoover 2268.

*Reviewer: John Dickerson*
These are four year old systems and need to be replaced with the latest technology.

*Reviewer: Steven Kovarik*
These systems need replacement but look to eCRT to help in configuration. We have other labs that may need like configurations and should look to streamline purchases in a global venue.

*Reviewer: Chris McCoy*
This lab upgrade has been put off twice. It needs to be done as soon as possible. The proposed solution is very reasonable and fits within the model requested by Dean Kushner to move towards a GRID environment.
Proposer: Matt Nelson  
Department: AERE  
Status: Approved (conditions as outlined below)  
Requested Funding: $18,000  
Total Awarded: $18,000  

Start Date: 6/30/2007  
End Date: 8/1/2007  
Project Description: Upgrade computers located in 2362 Howe  
Rationale: The computers currently used in this lab are 5 years old or greater and no longer meeting the needs of the students and the projects they do in this lab.  
Proposed Solution: Upgrade the 10 computers used in the lab to workstations capable of running the following applications: MATLAB, Solidworks, Util-board and PSpice.  

Note: The funding support for this lab has recently transitioned from ISGC (Iowa Space Grant Consortium) to the Engineering college.  
Seamless IT Compliance: These facilities are available to all engineering students  
Impact to Education: This lab hosts many EE/CprE/AerE/ME senior design projects each semester. In addition, the lab is used to teach AerE 265, Space Craft Systems and Operations. This class uses these systems for training, designing and operations of the space crafts used in this course. Approximately 45 students per semester use this lab for classes.

eCRT Restrictions: Systems must be managed within the college paradigm. Perhaps systems from 2332 would be appropriate. Examine the level of machine needed and tailor accordingly.  

TOTAL PROPOSED $18,000  
TOTAL AWARDED $18,000  

Conditions:  
Systems must be managed within the college paradigm. Examine the level of machine needed and tailor accordingly. Use CoE standard configuration; common access.
Howe 2362 computer upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $18,000

Restrictions:

- Systems must be managed within the college paradigm. Perhaps systems from 2332 would be appropriate. Examine the level of machine and tailor accordingly.

**Reviewer: Chris McCoy**
- The "need" is not defined here, but it seems like any of the AERE facilities could meet the need for this, especially since there are a number of very nice upgrades planned for the department.

- More information clearly would be helpful.

**Reviewer: John Dickerson**
- Is there something special about these machines other than the fact that they're in the SSOL room? Aren't there other teaching labs that could be used?

**Reviewer: Don Schlagel, Alan Kuutilla**
- standardize configs.

**Reviewer: Chris McCoy**

- **Restrictions**
  - Limit computer selection to standard ENGR computer @ ~$1300/system.

- **Comments**
  - Upgrade as needed. Cost is excessive -- closer to $1300 per system is more realistic.
Proposer: Raj Raman / Alan Kuuttila
Department: ABE
Status: Approved (conditions as outlined below)
Requested Funding: $40,500
Total Awarded: $46,100

Start Date: 7/1/2007
End Date: 8/24/2007

Project Description: Replace 27 three-year old out-of-warranty computers in room 201 I ED II (teaching and open lab). Of these 27 computers, 10 will be moved to the Fluids lab in Davidson where they will be used to run SimHydraulics and other software for Dr Brian Steward's courses, while the remaining 17 will be returned to the ECSS common pool. Twenty-seven new mid-level desktops will replace the machines that were removed.

Rationale: 201 IED II is a heavily used lab that serves critical COE and departmental teaching needs (e.g., ENGR 160 & 170, TSM 115, 116, & 216, AE 271 & 272). The room is also serves special request class needs and as an open lab.

Proposed Solution: Replace three-year old Dell computers in high teaching-load lab. The courses taught in IED II room 201 are core courses for virtually all 450+ students in ABE. Furthermore, IED II is extremely convenient to students living just north of campus, and we hope to see it become more heavily used by all COE students over the next year. Having up-to-date equipment and software will help this.

Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: We can deliver the full complement of COE software with up-to-date machines. We will be able to run the most recent versions of CAD software for our multiple CAD-based courses.

eCRT Restrictions: Common system w/ dual-monitors and access.

TOTAL PROPOSED $40,500

TOTAL AWARDED $46,100

Conditions:
Use CoE standard configuration with dual-monitors; common access.
Improvements to Teaching/Open Lab in 201 I ED II: eCRT

Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $ 46,100

Restrictions:
- Common system w/ dual-monitors and access.

**Reviewer: Chris McCoy**
- **Restrictions**
  Allocation should be closer to $35,000 for budget purposes. System should be part of a bulk buy across the college.
- **Comments**
  The estimate is high, but the request is reasonable.

**Reviewer: Steven Kovarik**
- $1500 each may be high, look to eCRT to choose appropriate systems for their use may end up saving on the configuration and also keep the systems alike across the college resulting in IT support configuration costs as all systems can have the same build (i.e. Ghost etc.).

**Reviewer: John Dickerson**
- Sounds reasonable. The system required seems very similar to other basic CAD lab upgrade proposals. The cost should reflect a bulk purchase for the similarly upgraded labs.

**Reviewer: Don Schlagel**
- standardize config.
**IMSE - SWEENEY 1218 UPGRADE**  
**FY08**

Proposer: Mike Renze  
Department: IMSE  
Status: Approved (conditions as outlined below)  
Requested Funding: $12,000  
Total Awarded: $12,000

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<th>Start Date:</th>
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<td>7/30/2007</td>
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<tr>
<td><strong>Project Description:</strong></td>
<td>Upgrade computers to Optiplex GX745</td>
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<tr>
<td><strong>Rationale:</strong></td>
<td>The computers in this lab are 4 years old. Currently there are only 4 machines in this lab, but the lab is getting much heavier use in required and elective courses. Lab specific to enrolled IE248, 348, 448, 446/546, 449/549, 545</td>
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<td><strong>Proposed Solution:</strong></td>
<td>Replace with eight new machines</td>
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<td><strong>Seamless IT Compliance:</strong></td>
<td>Restricted because they are connected to industrial CNC machines</td>
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<tr>
<td><strong>Impact to Education:</strong></td>
<td>This will allow additional access to students in courses to utilize CAD/CAM software.</td>
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**eCRT Restrictions:**

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<td><strong>TOTAL AWARDED</strong></td>
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**Conditions:**  
CoE standard configuration; common access
IMSE - Sweeney 1218 upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $12,000

Restrictions:

**Reviewer: Don Schlagel**
perhaps reallocate some machines that are being replaced elsewhere?

**Reviewer: Chris McCoy**

*Restrictions*
Limit allocation to four systems of a common variety to be decided by eCRT for mainstream computing.

*Comments*
$12,000 for 4 systems? This should be at most $6,000 and probably closer to $4800.

**Reviewer: Chris McCoy**
Repurposed computers need to be used here.

**Reviewer: Steven Kovarik**
12K for 4 machines seems high. Look to eCRT for configuration. It almost sounds like the machines are used heavily so are you asking for 12K for more then 4 machines. It is unclear what is being requested.
LEARNING PORTAL SERVER REPLACEMENT FY08

Proposer: John Jackman
Department: IMSE
Status: Approved (conditions as outlined below)
Requested Funding: $ 7,000
Total Awarded: $ 7,000

Start Date: 7/1/2007
End Date: 12/31/2007
Project Description: Replacing servers used in the learning portal used to provide a realistic enterprise IT experience to students.
The learning portal also supports internationalizing experience which has ISU students teamed with students from international universities.

Rationale: Needed to maintain system reliability.
Proposed Solution: Replace current equipment with newer equipment.
Seamless IT Compliance: These facilities are restricted
Impact to Education: The learning portal provides a realistic IT experience to all students in three required courses (including one with significant enrollment from outside of IMSE).
This also supports an innovative international experience required of all IE students.

eCRT Restrictions: size appropriately

TOTAL PROPOSED $ 7,000

TOTAL AWARDED $7,000

Conditions:
Size appropriately
Learning portal server replacement: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $7,000

Restrictions:
  - size appropriately

**Reviewer: Chris McCoy**
  The status of the existing server is not known as is the sizing requirements for such a server. What capabilities are needed? What features are required?

**Reviewer: John Dickerson**
  How come eCRT is not involved in any way in the oversight of this system? Any approval of this should be contingent upon oversight by eCRT.

**Reviewer: Don Schlagel**
  Not enough information. Could a server that is being retired due to the SAN be utilized for such a role? Without more information it is hard to know.

**Reviewer: Alan Kuutilla**
  Perhaps Distance Education?

**Reviewer: Steven Kovarik**
  What functionality does this system serve. It is unclear as to its function or that it truely needs a $7000 server to work appropriately. More information needed.
ME BLACK 1012 OPEN COMPUTER LAB UPGRADE

Proposer: Hap Steed
Department: ME
Status: Approved (conditions as outlined below)
Requested Funding: $64,500
Total Awarded: $64,500

Start Date: 7/1/2007
End Date: 12/1/2007
Project Description:
- Upgrade 41 existing computer systems @ ~ $1500
- Replace 1 HP printer @ ~ $3000

Rationale:
Computer Systems are out of warranty
Printer is over 4 years old and has required a lot of repair.
We will move this printer to a lab with less demands.

Proposed Solution:
Purchase systems that have dual core processor, 4 gig RAM, 256 meg RAM on video card.
Purchase a new HP will allow printing on both sides, a feature requested by many students. 2000 page feeder, comparable to HP 8150

Seamless IT Compliance:
These facilities are available to all engineering students

Impact to Education:
This room is open to all engineering students and all students taking engineering classes.
The room is heavily used every day and night.
In addition to the 40 computer systems there is ample study space for students to meet and work on joint projects.

eCRT Restrictions:
Use standard configuration and access.

TOTAL PROPOSED $64,500

TOTAL AWARDED $64,500

Conditions:
CoE standard configuration; common access.
ME Black 1012 Open Computer lab Upgrade: eCRT Review
Panel Comments

*ECRT Panel Summary:*
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $ 64,500

Restrictions:

Use standard configuration and access.

**Reviewer: Chris McCoy**
Indicate if all computers should be replaced or if a portion should be replaced immediately. Since this is one of the major open labs on the south end of the college, it should have resources to handle the load.

**Reviewer: Steven Kovarik**
The systems in this lab are open to the general college community and as such should have systems that can handle the load.

**Reviewer: John Dickerson**
Seems reasonable. What is the age of the equipment in this room? Considering the demand for funding this year, it would be nice to know the priority the department places on this upgrade relative to the other requests.

**Reviewer: Don Schlagel**
This is a highly visible lab. It is used by all students.
### ME BLACK 1020 COMPUTER DESIGN ROOM

**Proposer:** Hap Steed  
**Department:** ME  
**Status:** Approved (conditions as outlined below)  
**Requested Funding:** $90,300  
**Total Awarded:** $61,000

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**Project Description:** Replace 21 CAD computer systems with new units with dual flat screen monitors

**Rationale:** Units are out of warranty  
**Proposed Solution:** Replace old systems with Precision Workstations specifically designed for heavy CAD work such as the Dell 490 with beefed up video cards, dual 20 monitors, dual core processors, 4 gig ram.

**Seamless IT Compliance:** These facilities are available to all engineering students  
**Impact to Education:** This room is open to all engineering students except when class are in session. This room was designed as a CAD room with large tables at each workstation for laying out drawings and related paperwork. It is the only computer lab in Black specifically designed for CAD work.

**eCRT Restrictions:** Coordinate configuration to be same solution as Howe 2332 -- ~Dell 390, FX3450 graphics card, 4GB RAM, single disk, dual-19"

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**Conditions:**  
Coordinate configuration to be the same solution as Howe 2332. Use CoE standard configuration; common access.
ME Black 1020 Computer Design Room: eCRT Review
Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $61,000

Restrictions:

- Coordinate configuration to be same solution as Howe 2332 -- ~Dell 390, FX3450 graphics card, 4GB RAM, single disk, dual-19"

**Reviewer: Alan Kuutilla**
The need for more of these types of labs in the COE to run Engineering software is a must!

**Reviewer: Steven Kovarik**
System overkill. This is CAD and I don't think it needs a $4300 system. I would look to eCRT to find an appropriate system to handle the load. Not sure Dual 20" monitors are needed at the cost. 19" is much more cost effective and loses little in the transition.

**Reviewer: John Dickerson**
Considering the demand for funding this year, it would be nice to know the priority the department places on upgrading this lab relative to the other proposals.

The costs for this lab are very high. The system specs seem unwarranted. A less costly configuration should be chosen.

**Reviewer: Don Schlegel**
Systems seem to be WAY overspec'd for the need.

**Reviewer: Chris McCoy**
The equipment is probably overspec'ed for the needs $4300 per system is excessive. This should be reviewed to make the best use of funds. Ordinary CAD does not require a $4300 system.
**ME BLACK 1059 INTERNAL COMBUSTION ENGINES & DESIGN**

**FY08**

Proposer: Song-Charng Hong· Hap Steed  
Department: ME  
Status: Approved (conditions as outlined below)  
Requested Funding: $4,600  
Total Awarded: $4,600

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**Project Description:** Replace the old data acquisition system that is used in the internal combustion engine lab for undergraduate education.

**Rationale:** Current system is 5 years old and out of warrantee and too slow for current data acquisition need. The system does not give stable performance and often affects the quality and continuity of laboratory sessions.

**Proposed Solution:** A new data acquisition system is proposed that consists of a high-performance desktop computer ($2000), a multi-function acquisition card ($1,600), and a shaft encoder ($1,000). The proposed computer is a Dell XPS 410 with 22" widescreen panel, 256 MB ATI Radeon, Intel core 2 duo processor, 2 GB dual channel SDRAM, and a 320 GB hard drive. The data acquisition card is 16-bit, 48 digital input/output with a total capacity of 1.25 M samples per second. It can provide multiple high-speed channels to measure the cylinder pressure and injection signal, and low-speed channels for intake/exhaust pressures and temperatures. The new shaft encoder will provide accurate engine crank angle position in digit forms for robust data acquisition.

**Seamless IT Compliance:** These facilities are restricted.

**Impact to Education:** This project provides a state-of-the-art data acquisition system for engine combustion analysis for students. The internal combustion engine course is a highly demanded technical elective course in ME (243 student hours in AY 2007). Many ME seniors look forward to taking this course passionately. We are the leading institute among the nation to offer numerous engine laboratory sessions to undergraduate students. The proposed new data acquisition system will enable students to perform accurate combustion analysis inside the engine by using regular diesel fuel and biodiesel. This project will greatly enhance the learning experience of students for practical engine combustion and emissions analysis, in particular, using biorenewable fuels.

**eCRT Restrictions:** Use standard system (Optiplex) with increased hard disk space (perhaps two hard drives) and display.

**TOTAL PROPOSED**  
$4,600

**TOTAL AWARDED**  
$4,600

**Conditions:**  
Use standard system (Optiplex) with increased hard disk space and display.
ME Black 1059 Internal Combustion Engines & Design: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now  
Funding Recommendation: $ 4,600

Restrictions:
Use standard system (Optiplex) with increased hard disk space (perhaps two hard drives) and display.

**Reviewer: Chris McCoy**
Does this require a new computer or can an older computer be repurposed?

**Reviewer: Steven Kovarik**
Is the encoder a separate hardware piece. Does this need a new system or would something out of another lab work to make this functional.

**Reviewer: Don Schlagel**
perhaps a precision workstation from 2268 hoover could be used to drive this? They are under warranty for another year and a half.
ME BLACK ROOM 0083 OPEN COMPUTER LAB UPGRADE FY08

Proposer: Hap Steed
Department: ME
Status: Approved (conditions as outlined below)
Requested Funding: $19,500
Total Awarded: $19,500

Start Date: 7/1/2007
End Date: 12/1/2007
Project Description: Replace 13 existing computer systems with current systems @ $1500 each
 Upgrade one printer @ $2000

Rationale: Systems are out of warranty
Proposed Solution: Purchase systems that have dual core processor, 4 gig RAM, 256 meg ram on video card. Systems as similar to the one purchased for 1012 Black.

Replace 5 year old printer with new HP printer capable of printing on both sides. Medium use unit.

Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: This is an open computer lab that is vital to the success of the ME program. In addition to the 13 computer systems there is ample study space for students to meet and work on joint projects.

eCRT Restrictions: Use standard desktop configuration. Shift tube displays from 1020 to 0083 (room heat is desired!).

TOTAL PROPOSED $19,500

TOTAL AWARDED $19,500

Conditions:
Use CoE standard configuration; common access. Shift tube displays from 1020 to 0083.
ME Black Room 0083 Open Computer Lab Upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $ 19,500

Restrictions:
Use standard desktop configuration. Shift tube displays from 1020 to 0083 (room heat is desired!).

*Reviewer: Steven Kovarik*
Look to eCRT for appropriate configurations.

*Reviewer: Don Schlagel*
standardize

*Reviewer: Chris McCoy*
Computer estimates are high.
ME HOOVER BREAK OUT CAD DESIGN
ROOM UPGRADE

Proposer: Hap Steed  
Department: ME  
Status: Approved (conditions as outlined below)  
Requested Funding: $30,000  
Total Awarded: $21,000

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**Project Description:**  
Upgrade 8 existing CAD systems with new Precision Workstations @ ~ $3600  
6- for small break out rooms in Hoover, 1st floor Hoover  
1345,1343,1337,1245,1243,1237  
Keep existing large smart board for the monitor  
1- for instructor’s station in 1233 Hoover  
1- for lab manager (Larry Hanft) - two flat screen monitor system  
1- printer for lab manager~ $1200

**Rationale:**  
These units are out of warranty - over 4 years old

**Proposed Solution:**  
Purchase precision workstations designed for heavy CAD work such as the Dell 490 mini-tower.  
dual core processor, 4 gig ram, 512 n Vida video card. Similar to this recommended for 1020 Black

**Seamless IT Compliance:**  
Facilities use mainly by ME students taking ME 270, ME 415. Have been available to others upon request.

**Impact to Education:**  
These rooms are used students taking ME 270, ME 415 classes design classes. Over 200 students per semester rely on these systems and rooms to work on joint projects in the above mentioned classes. Room size is limited to 5-6 students. As these rooms fill quickly any overflow students migrate the CAD Design lab in 1020 Black.

**eCRT Restrictions:**  
Coordinate configuration to be same solution as Howe 2332 -- ~Dell 390, FX3450 graphics card, 4GB RAM, single disk, dual-19" (except break-out rooms).

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<th>TOTAL PROPOSED</th>
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<td>TOTAL AWARDED</td>
<td>$21,000</td>
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**Conditions:**
Coordinate configuration to be the same solution as Howe 2332, CoE standard configuration; common access.
ME Hoover Break Out CAD Design Room Upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now
Funding Recommendation: $21,000

Restrictions:
- Coordinate configuration to be same solution as Howe 2332 -- ~Dell 390, FX3450 graphics card, 4GB RAM, single disk, dual-19" (except break-out rooms).

**Reviewer: John Dickerson**
The costs for this equipment seem way over spec'd. No way that CAD systems need a $4300 workstation.

**Reviewer: Don Schlager**
Excessive for the needs of the room. Precisions are overkill.

**Reviewer: Chris McCoy**
This is excessive and needs to be reconsidered.

**Reviewer: Steven Kovarik**
Systems administrator machine again, with dual monitors and a printer. This seems out of the range of use for the role. Look to eCRT for appropriate configurations.
ME/IMSE MEDIA CENTER UPGRADE FY08

Proposer: Hap Steed
Department: ME
Status: Approved (conditions as outlined below)
Requested Funding: $33,450
Total Awarded: $27,000

Start Date: 7/1/2007
End Date: 12/1/2007

Project Description:
Upgrade 15 laptops from the ME/IMSE media center @ $1500.
Replace 2 - LCD projectors over 5 years old @ $1800.00 = $3600
Upgrade 3 desktops 4 year old = 4500
Replace 20 year old vcr/tv system = $600
Replace 5 year old digital cameras = $650
LCD bulb replacement as needed $1000
Install security camera - $600

Rationale:
All laptops are out of warranty, and slow compared to today's systems.
5 laptops are 4.5 year old
10 laptops are 3 years old
Digital camera is very low resolution, uses floppies for storage

Proposed Solution:
Purchase medium grade laptops for checkout to all ME and IMSE students - Gateway or Dell units
Purchase new cvr/dvd tv system
Purchase 2 medium grade projectors
Purchase one digital, 8 mpix, 12xzoom, close-up capabilities

Seamless IT Compliance:
ME and IMSE

Impact to Education:
This operation is limited to ME and IMSE students because of the limited number of systems in the inventory. This operation services over 1500 students in the college providing them mobile computing in order to accomplish their academic assignments. Systems are loaded with current software including CAD packages and specialized software for the ME and IMSE programs. There are over 500 checkouts per semester through this center.

eCRT Restrictions:
Announcements to students in the "south zone" (AER, MSE, IMSE, ME) informing them of what's available to them. Create standard procedures & policies.

Move security camera to college project; Check for repurposed desktop systems before investing in new ones.

EFTF Committee needs to verify that projectors and digital cameras (not security) are appropriate expenses.

TOTAL PROPOSED $33,450

TOTAL AWARDED $27,000

Conditions:
Media Center to be a “South Zone” (AER, MSE, IMSE, ME) media center. Inform students of what is available via a formal announcement. Create standard procedures & policies. Contact Dean Student Advisory Committee for the honor code to utilize in student releases.

Move security cameras to a collaborated college project; Check for repurposed desktop systems before investing in new ones.
ME/IMSE Media Center Upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Critical: Fund Now  
Funding Recommendation: $ 27,000

Restrictions:
- Announcements to students in the "south zone" (AERE,MSE,IMSE,ME) informing them of what's available to them.  
  Create standard procedures & policies.
- Move security camera to college project; Check for repurposed desktop systems before investing in new ones.
- EFTF Committee needs to verify that projectors and digital cameras (not security) are appropriate expenses.

**Reviewer: Chris McCoy**
Given the demands for other resources, these seem imprudent to invest in. Camera should not be included here.  
Operating expenses should not even be listed here.

**Reviewer: Don Schlagel**
This seems to be a 'catch-all' proposal... computers, TV's, vcrs, dvd players, dig. cameras, and security cameras -- it has it all

**Reviewer: Steven Kovarik**
Cameras should be in College Central proposal. Digital cameras should be purchased elsewhere. VCR or DVD players are not computing and should be funded elsewhere.

If laptops and desktops are funded then eCRT should be looked to for appropriate configurations.

Operating expenses such as bulbs are operating expenses.

**Reviewer: John Dickerson**
Considering the demand for funding this year, these items seem like a luxury. It is hard to justify spending for this proposal compared to the other requests.
Proposer: Steven Kovarik
Department: ECPE
Status: Approved (conditions as outlined below)
Requested Funding: $109,400
Total Awarded: $52,300

Start Date: 7/2/2007
End Date: 10/5/2007

Project Description:
This project will replace all equipment that is located now in the ALC. Computers all approx $1500. This includes 28 TA computers in open area that are used by TA's mainly but are also available to the general population.

1 Computer and new scanner for students use. Scanner Approx $500

3 computers and 46 inch flat screen displays for the corner collaboration areas. 46 inch Flat Screens approx $2800 each

32 computers used by general population as general open computing college level computing. $1500 each

1 high speed color printer. $3000

Rationale:
This is the general computing open area for all students in the ECpE department but is also a shared space available to all students in the college of engineering.

Proposed Solution:
Replace all computers, Color printer, scanner, and old 3 outdated Displays in the collaboration areas with new equipment. Will work with engineering college IT staff to configure appropriate workstations for this area.

Seamless IT Compliance:
These facilities are available to all engineering students

Impact to Education:
This is a highly utilized area in ECpE that allows for all students to gather and work on class work or collaborate in projects. It impacts education by allowing students to work together and collaborating in a highly configured space.

This space is available to all college of engineering students.

eCRT Restrictions:
Replace 32 student computers, color printer, and scanner. Wait on TA computers and 46” flat-panel displays (resubmit next year). Use standard desktop configuration.

TOTAL PROPOSED $109,400

TOTAL AWARDED $52,300

Conditions:
Replace 32 student computers, color printer, and scanner. Wait on TA computers and 46” flat-panel displays (resubmit next year). Use CoE stand configuration; common access.
ALC Computer and Printer Upgrades: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Important: Fund as Appropriate
Funding Recommendation: $52,300

Restrictions:
Replace 32 student computers, color printer, and scanner. Wait on TA computers and 46" flat-panel displays (resubmit next year). Use standard desktop configuration.

*Reviewer: John Dickerson*
Replacing all of the equipment is simply too high a price tag. Strongly consider a partial upgrade of the most degraded equipment.

*Reviewer: Jim Wellman*
seems appropriate

*Reviewer: Alan Kuutilla*
This seems like a pretty broad proposal. Do we really need a 42" TV? Do the TA computers fall within the EFTF guidelines?

*Reviewer: Don Schlagel*
While the computers obviously need to be replaced, it seems that since a large majority of the machines are for TA's this does not exactly "gel" with EFTF guidelines... I think some additional discussion is needed.

*Reviewer: Chris McCoy*
This is a very broad and complex project. The project needs some discussion and investigation to determine what's appropriate and if everything "needs" replaced immediately. For example, 46" flat panel TV's is a considerable expense, especially if existing equipment works. Also, 28 computers "for TA's" will raise some concerns about access for student use and appropriateness.

I strongly recommend moving forward cautiously, looking for options of relocating existing computers and re-examining other options. There are "critical" computing facilities within the department that should absolutely be funded first and this project should not take away from those.
CLASSROOM UPGRADES IN TOWN ENGINEERING

Proposer: Josh Klesel
Department: CCEE
Status: Approved (conditions as outlined below)
Requested Funding: $14,500
Total Awarded: $10,000

Start Date: 6/1/2007
End Date: 6/30/2007
Project Description: replace wired keyboards in classrooms in Town Engineering with wireless keyboards in rooms 250, 296, 280, 270. There is also a need for a computer in room 250 (the other rooms have computers).

The projectors in 134 and 178 Town are old and dim. Given the size of the rooms (29 computers in 134, a large classroom in 178) there is a need for a more powerful projector in the room. Both projectors are 6-7 years old.

New printers for 210 and 220 are also needed, as the current printers are low volume and do not meet classroom needs.

Rationale: The wired keyboards in rooms are limiting because of their cable and have been stolen in the past. Getting quality (Gyration) wireless keyboards and mice will allow teachers more flexibility while lecturing. The department will pay for small lockboxes for these mice.

A network scanner like that in 3337 Hoover would work well in 110 Town. Allowing students to scan items quickly to network share without using a computer.

Proposed Solution:
1 computer (Optiplex 745) - $1100
4 wireless keyboard and mice - $1,000
1 projector for 134 Town - $4000
1 projector for 178 Town - $4000
2 black and white 11x17 printers - $3000?
1 IS2000 network color scanner - $1400

Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: see rationale

eCRT Restrictions: Reduce cost of projectors. Coordinate scanners and printers with college standards.

TOTAL PROPOSED $14,500

TOTAL AWARDED $10,000

Conditions: Reduce cost of projectors. Coordinate scanners and printers with college standard configuration.
classroom upgrades in Town Engineering: eCRT Review

Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Important: Fund as Appropriate
Funding Recommendation: $10,000

Restrictions:
- Reduce cost of projectors. Coordinate scanners and printers with college standards.

**Reviewer: John Dickerson**
Sounds a justifiable expense. We need to keep the teaching labs up to par.

**Reviewer: Steven Kovarik**
Projector cost seems high, look to eCRT to find appropriate systems for whole college as this seems to be something that is going to be requested more across the board.

**Reviewer: Chris McCoy**
Similar to 206/290 request, this one also includes computing equipment. Perhaps this one is more justified than the other. Both are a good idea.

**Reviewer: Don Schlagel**
These updates would enhance the learning experience in these rooms.

**Reviewer: Jim Wellman**
Question the need for $4000 projectors

**Reviewer: Alan Kuutilla**
Why wireless at this expense? Projector cost is too high. Can't projectors from other proposals be used?
HOWE 142 PRINTER REPLACEMENT  FY08

Proposer: Jim Wellman
Department: AERE
Status: Approved (conditions as outlined below)
Requested Funding: $ 5,000
Total Awarded: $ 2,000

Start Date: 6/30/2007
End Date: 8/1/2007
Project Description: Replace HP 8100LJ with freestanding all-in-one
Rationale: Existing printer has exceeded its service life and is out of warranty.
Proposed Solution: Purchase a 3 year lease on an HP 4730x mfp
quote #1201803
HP (800)888-5858

Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: Provide printing/copying/scanning to students located on the 1st floor of Howe Hall.

eCRT Restrictions: Printer is needed for 142. Discuss MFP options and consider if college concensus is reached on appropriate options.

TOTAL PROPOSED
$ 5,000

TOTAL AWARDED
$2,000

Conditions:
Discuss MFP options and consider if college concensus is reached on appropriate options.
Howe 142 printer replacement: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Important: Fund as Appropriate
Funding Recommendation: $ 2,000

Restrictions:

Printer is needed for 142. Discuss MFP options and consider if college consensus is reached on appropriate options.

**Reviewer: John Dickerson**
Should be considered once more critical needs are met.

**Reviewer: Chris McCoy**
We had a strategy for printer all-in-one replacement. I thought we had agreed to standardize on the Ricoh and that we would spread them out through the college before installing more in a single department? This is a very costly piece of equipment (although I will concede that the all-in-one is used heavily in AERE).

**Reviewer: Don Schlagel**
Seems rather high. What happened to the Ricoh standard approved last year?

**Reviewer: Steven Kovarik**
This seems like overkill for a printing solution. Why an MFP as opposed to a less expensive printer when you have a Ricoh copier available in the building. What is the fax portion used for by students?

What alternatives are there as a solution for this.
HOWE 2228 PRINTER REPLACEMENT FY08

Proposer: Jim Wellman
Department: AERE
Status: Approved (conditions as outlined below)
Requested Funding: $ 5,000
Total Awarded: $ 5,000

Start Date: 6/30/2007
End Date: 8/1/2007
Project Description: Replace LJ 8100 with free standing color laser printer
Rationale: Existing printer has exceeded its service life and is out of warranty
Proposed Solution: Replace printer
Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: Provides color printing for students

| eCRT Restrictions: | Coordinate with concensus solution for printing. This solution needs to be floor-standing and should print color if cost-effective, otherwise BW. |

TOTAL PROPOSED $ 5,000

TOTAL AWARDED $5,000

Conditions:
Coordinate with concensus solution for college-wide printing. Solution should be floor-standing and print color if cost-effective.
Howe 2228 printer replacement: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Important:Fund as Appropriate
Funding Recommendation: $ 5,000

Restrictions:
Coordinate with a consensus solution for printing. This solution needs to be floor-standing and should print color if cost-effective, otherwise BW.

*Reviewer: Steven Kovarik*
In another project you are talking about a Laserjet 4730 MFP which also allows for color printing. I would look at allowing all machines to print to one or the other and not having multiple color printers as this is a costly venture that could be avoided with appropriate planning.
**LABVIEW CART**

Proposer: Josh Klesel  
Department: CCEE  
Status: Approved (conditions as outlined below)  
Requested Funding: $ 3,300  
Total Awarded: $ 1,550

<table>
<thead>
<tr>
<th><strong>Start Date:</strong></th>
<th>7/2/2007</th>
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<tbody>
<tr>
<td><strong>End Date:</strong></td>
<td>7/30/2007</td>
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<tr>
<td><strong>Project Description:</strong></td>
<td>LabVIEW cart for instructional use in class.</td>
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<tr>
<td><strong>Rationale:</strong></td>
<td>LabVIEW is used in pockets around the college. Now that we have both a research and teaching license, the department would like to try to integrate LabVIEW into the classroom. To be able to do this, there first has to be the infrastructure. This mobile cart we be an inexpensive way to bring the technology into the classroom for a demonstration or lab.</td>
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</table>
| **Proposed Solution:** | Computer  
- Laptop or SFF desktop $1,000  
- Cart - $750  
- LabVIEW DAQ USB - $1,000  
- GPIB-USB-HS - $550 |
| **Seamless IT Compliance:** | These facilities are available to all engineering students |
| **Impact to Education:** | This could broaden the technical education students receive. LabVIEW is used heavily in the industry, and would be a good skill for our students to have. |
| **eCRT Restrictions:** | Use recycled PC and existing cart. Fund DAQ and GPIB-USB-HS. Report on use for future investment. |

**TOTAL PROPOSED**  
$ 3,300

**TOTAL AWARDED**  
$1,550

**Conditions:**  
Use recycled PC and existing cart. Fund DAQ and GPIB-USB-HS. Report on use for future investment.
**LabVIEW cart: eCRT Review Panel Comments**

**eCRT Panel Summary:**
Proposal Priority Recommendation: Important: Fund as Appropriate
Funding Recommendation: $ 1,550

Restrictions:

- Use recycled PC and existing cart. Fund DAQ and GPIB-USB-HS. Report on use for future investment.

**Reviewer: John Dickerson**
Where is this request coming from? It's not clear to what degree this is needed. Could be funded provided other more critical needs are met.

**Reviewer: Chris McCoy**
Seems reasonable, but obviously isn't required -- just nice to have. The "cart" may be considered furniture and not fundable via CAC guidelines.

**Reviewer: Steven Kovarik**
Good idea but should be looked at after the core issues are dealt with, Would look to fund the cart with other funding.

**Reviewer: Don Schlagel**
would be a good thing to promote labview, but I don't know if it falls within the letter of the law.
Proposer: Hap Steed
Department: ME
Status: Approved (conditions as outlined below)
Requested Funding: $18,000
Total Awarded: $13,500

Start Date: 7/1/2007
End Date: 12/1/2007
Project Description: Replace 9 existing computer systems @ $2,000
Rationale: Out of warranty systems
Proposed Solution: Replace 9 units with systems that have dual core processor, 4 gig RAM, 256 meg RAM on video card.
Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: This room is used heavily by the graduate students in the ME program. It is open to all students in the daytime but restricted by key entry at night to ME graduate students.

eCRT Restrictions: Use college standard desktops.

TOTAL PROPOSED $18,000

TOTAL AWARDED $13,500

Conditions:
Use CoE Standard configuration.
ME Black 0095D Grad Computer: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Important: Fund as Appropriate
Funding Recommendation: $13,500

Restrictions:

- Use college standard desktops.

**Reviewer: John Dickerson**
- What is the age of the equipment in this lab? (It seemed pretty decent to me the last time I looked).
- Considering the demand for funding this year, it would be nice to know the priority the department places on the upgrade of this lab relative to the other requests.

**Reviewer: Don Schlage1**
- use std. config

**Reviewer: Steven Kovarik**
- System cost seem high. Look to eCRT for appropriate systems. If this is a Grad lab, is it used for funded research, if yes then it cannot be covered with EFTF funding. This is a fine line and we need a way to know what is appropriate or not.

**Reviewer: Chris McCoy**

**Restrictions**
- To use common desktop system at ~$1300/ea for 11,700.

**Comments**
- As long as these computers are used for educational purposes, this seems appropriate. However, if used for research, EFTF cannot currently support. $2000 per system is excessive -- a better price estimate is ~$1300.
ME BLACK 1051 MANUFACTURING LAB FY08

Proposer: Hap Steed  
Department: ME  
Status: Approved (conditions as outlined below)  
Requested Funding: $12,600  
Total Awarded: $12,600

**Start Date:** 7/1/2007  
**End Date:** 12/1/2007  
**Project Description:** Upgrade 7 computer systems. @~ $1800  
- 6 - lab machines  
- 1- instructor/technician system  

**Rationale:** Units are out of warranty, slow and need replaced by today's standards.  
**Proposed Solution:** Purchase systems that have dual core processor, 4 gig RAM, 256 meg ram on video card.  
Systems will have dual monitor systems as requested by students using this facility.

**Seamless IT Compliance:** These facilities are available to all engineering students  
**Impact to Education:** This room is open to all students taking manufacturing courses in the ME program. Installed on these systems are the common off the top software plus specialized CAD/CAM software for operations only in this lab. 120 students per semester pass through this lab. The lab is open to all except when classes are in session.

**eCRT Restrictions:** Use college standard desktops, w/ dual-displays (best price-point between 19"/20")

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**TOTAL PROPOSED**  
$12,600  

**TOTAL AWARDED**  
$12,600

**Conditions:**  
Use CoE standard configuration with dual-displays.
ME Black 1051 Manufacturing Lab: eCRT Review Panel

Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Important: Fund as Appropriate
Funding Recommendation: $12,600

Restrictions:
- Use college standard desktops, w/ dual-displays (best price-point between 19”/20”)

**Reviewer: Don Schlagel**
- Restrictions
  - Remove sys. admin machine and standardize configuration of other machines.
- Comments
  - System Admin machine should not be in here. Why is it? Machine costs should be standardized.

**Reviewer: Chris McCoy**
- Restrictions
  - Reduce to be student machines only and reduce cost per system to standard college build.
- Comments
  - System administrator system should not be part of this proposal. $1800 per system is high.

**Reviewer: Steven Kovarik**
- What is the administrator system and why is it needed here. Look to eCRT for appropriate systems.
**ME NEL 102 OPEN COMPUTER LAB**

**FY08**

Proposer: Hap Steed  
Department: ME  
Status: Approved (conditions as outlined below)  
Requested Funding: $9,000  
Total Awarded: $9,000

**Start Date:** 7/1/2007  
**End Date:** 12/1/2007  
**Project Description:** Upgrade 6 computer systems. No monitors need. Will use monitors from 1020 Black when they are replaced this year.

**Rationale:** Units are out warranty.

**Proposed Solution:** Purchase systems as recommended by college IT staff. Similar to units in 1012, 0083 Black.

**Seamless IT Compliance:** These facilities are available to all engineering students

**Impact to Education:** This is an open computer lab used by all engineering students especially student groups and grad students housed in NEL. It is the only college computer lab in NEL.

**eCRT Restrictions:** Use college standard desktops.

**TOTAL PROPOSED**  
$9,000

**TOTAL AWARDED**  
$9,000

**Conditions:**  
Use CoE standard configuration; common access
ME NEL 102 Open Computer Lab: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Important: Fund as Appropriate
Funding Recommendation: $ 9,000

Restrictions:
   - Use college standard desktops.

*Reviewer: Don Schlagel*
   - standardize machine config

*Reviewer: Steven Kovarik*
   - Not sure the use or the need. Look to eCRT for computer appropriateness.

*Reviewer: Chris McCoy*
   - Need more information to determine true need.
POWERSYSTEM SIMULATOR LAB FOR UNDERGRADUATE AND GRADUATE INSTRUCTION FY08

Proposer: Jim McCalley
Department: ECPE
Status: Approved (conditions as outlined below)
Requested Funding: $65,000
Total Awarded: $20,000

Start Date: 7/1/2007
End Date: 6/30/2008

Project Description:

High-voltage electric power transmission systems are monitored and controlled in energy control centers. All owners of transmission equipment (e.g., MidAmerican Energy, Alliant Energy, Omaha Public Power, etc) have an energy control center. In addition, there exists a higher level of power grid monitoring and control, at the regional level, which coordinates with the individual transmission companies. In the Midwest US, this is done by the Midwest Independent System Operator (www.midwestiso.org), responsible for 13 states (including Iowa) and part of central Canada, located in Carmel Indiana. The core technology in an energy control center is the energy management system (EMS). The EMS is a complex software system that interfaces the data acquisition and communication systems distributed among thousands of substations with engineering personnel in the energy control center. The EMS includes extensive numerical algorithms which convert the raw data into information used for decision by the energy control center engineers. These engineers are responsible for the real-time reliability of the electric power grid. Although this description has used the Midwestern US as an example, it is equally applicable to any other region of North America, as well as most other industrialized countries in the world.

The state-of-the-art technology for training energy control center engineers is the Training Simulator (TS). The TS consists of exactly the same software as the EMS, with two additional components. First, instead of the actual power system, the TS contains a power system simulator. This simulator provides capability of simulating the actual operation of a power system over hours, days, even weeks, capturing the real-time dynamics of variation in demand, generation, flows, and voltages. Second, the TS contains an Instructors Module, which enables an instructor to define events (e.g., a short circuit on a particular transmission line) during the simulation, to test trainees’ understanding of various power system attributes.

There are perhaps 4 major vendors of EMS and TS in the world, and one of these four is AREVA T&D (www.areva-td.com). AREVA T&D has offered to provide ISU with their TS, with no charge for the corresponding software license. In addition, MidAmerican Energy Company has offered to provide ISU with the necessary data to load the Iowa power system onto the TS.

The lab will be housed on the first floor of the new Coover Hall addition and will be comprised of 30 client machines (for students) and a high-end server. Although the Coover Hall addition will not be completed until Spring 2008, work on installing the software and developing the model will begin in June 2007.

The server must have significant computational power in order to operate on large, realistic power system models.

Rationale:

This project will have impact at both the undergraduate and graduate instructional programs. The TS gives students very realistic views of how large-scale power grids operate and the engineering principles underlying this operation. These views are identical to the views engineers obtain in the energy control centers of the electric power industry. At the undergraduate level, the TS will be used in EE 303, 456, 457, and 458. At the graduate level, the TS will be used in EE 553, 554, and 653. No other university in the nation has a TS, and so we expect that our use of it will further propel ISU’s reputation as a national leader in power system engineering education, resulting in energy-companies viewing ISU graduates as the very highest caliber and most desirable energy-
Although we recognize that EFTF funds must support instructional activities, it is significant that the TS will also have value in research and extension and so will enhance all three legs of the land-grant mission. The cost-sharing arrangement described above under “Cost” reflects the multiple benefits of this project to the department, college, and university.

Proposed Solution: The $65k request to EFTF will be used to purchase the following computer hardware:

- **$20k**: 1 high-end server: Dell Power Edge 6850 with Dual-Core Intel® Xeon™ Processor 7040, 3.0Ghz, 2x2MB, 667Mhz FSB, with additional processor, 8Gig Ram.
- **$45k**: 30 client machines (~$1500/machine)

Seamless IT Compliance: Clients available to all students but the server is restricted.

Impact to Education: One of the major complaints associated with many engineering curricula is that there is not enough doing of engineering. Electrical engineering is a generally abstract discipline (students cannot directly see lines of magnetic flux, p-n junction diffusion currents, FM signals, or electric power flowing in transmission lines), and it is impossible to provide students with opportunities to “test-drive” power systems. Advanced, high-quality, and well-tested simulation environments such as the TS provide an excellent alternative means to provide students with this kind of hands-on experience so that they can see the implications of the underlying theory learned in class.

eCRT Restrictions: Fund server now. Resubmit proposal for desktops next year. System will not be connected to college network/services.

**TOTAL PROPOSED** $65,000

**TOTAL AWARDED** $20,000

**Conditions:** Fund server. Resubmit proposal for desktops next year. System will not be connected to college network/services.
Power System Simulator Lab for Undergraduate and Graduate Instruction: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Important: Fund as Appropriate
Funding Recommendation: $20,000

Restrictions:

- Fund server now. Resubmit proposal for desktops next year. System will not be connected to college network/services.

**Reviewer: Chris McCoy**

Sounds impressive. Cost is high and must be weighed. Can there be some options or is this all or nothing?

**Reviewer: Don Schlagel**

Could the client systems be virtualized somehow? Perhaps consider a terminal server instead? I don’t know the answers to these questions.
**PRINTER REPLACEMENTS, 1150, 2126 FY08**

Proposer: Don Schlagell  
Department: CBE  
Status: Approved (conditions as outlined below)  
Requested Funding: $5,000  
Total Awarded: $5,000

| Start Date: | 7/5/2007 |  
| End Date:   | 1/15/2008 |  
| Rationale:  | Students have asked for a color laser printer in the undergrad lab (1150). Aging color printer in 2126 and aging monochrome printer in 1150 need to be replaced. Printers in 1150 should have at least 2-3000 sheet capacity for the monochrome printer and 1500 sheet capacity for the color printer. Printer for 2126 can have less than 1000 sheet capacity. |  
| Proposed Solution: | 2 color printers and 1 monochrome printer. Whatever is decided by ECRT as fulfilling the needs will suffice. |  
| Seamless IT Compliance: | available to all students, but 2126 is controlled access currently. |  
| Impact to Education: | Students can print their homework and assigned projects. |  
| eCRT Restrictions: | Common standard printers. |  

**TOTAL PROPOSED**  
$5,000

**TOTAL AWARDED**  
$5,000

**Conditions:**  
Purchase CoE standard configuration printers.
Printer Replacements, 1150, 2126: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Important: Fund as Appropriate
Funding Recommendation: $5,000

Restrictions:
- Common standard printers.

*Reviewer: Steven Kovarik*
Do we need 2 color printers. Could we get by with 1 color printer that all systems have access to resulting in a cost savings and then just put B&W printers in other labs.

*Reviewer: Don Schlagel*
When this proposal was first written the 2126 lab had not been authorized to be open to all students. Now that it has I could consider a single color printer for use by all students in the first floor lab.

*Reviewer: Chris McCoy*
If funding permits, this is a good thing.
**TERMINAL SERVER**

Proposer: Jim Wellman  
Department: AERE  
Status: Approved (conditions as outlined below)  
Requested Funding: $ 4,000  
Total Awarded: $ 4,000  

**Start Date:** 6/30/2007  
**End Date:** 8/1/2007  
**Project Description:** Provide additional access to software resources from off-campus  
**Rationale:** Existing terminal servers are heavily loaded and need to be augmented  
**Proposed Solution:** Purchase a server to be configured as a Windows terminal server.  
**Seamless IT Compliance:** These facilities are available to all engineering students  
**Impact to Education:** Provide students the ability to work from home  

**eCRT Restrictions:** Restructure ENGR terminal servers into a single pool that can be shared by all departments for all users. Coordinate with existing services in ECPE and ECSS and consider repurposing file servers being transitioned to the SAN solution.  

**TOTAL PROPOSED**  
$ 4,000  

**TOTAL AWARDED**  
$4,000  

**Conditions:**  
Restructure ENGR terminal servers into a single pool that can be shared by all departments for all users. Coordinate with existing services in ECPE and ECSS and consider repurposing file servers being transitioned to the SAN solution.
Terminal server: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Important; Fund as Appropriate
Funding Recommendation: $ 4,000

Restrictions:

Restructure ENGR terminal servers into a single pool that can be shared by all departments for all users. Coordinate with existing services in ECPE and ECSS AND consider repurposing file servers being transitioned to the SAN solution.

**Reviewer: John Dickerson**
How many terminal server systems are there in AeroE now?

I'd like to see some sort of plan or metrics for how many terminal servers we're providing, how many students we're anticipating supporting, etc. These costs should be combined across the college.

I also think that until such time that remote computing is seen as the goal for computing in the college, providing remote computing is a luxury, not a requirement.

**Reviewer: Alan Kuutilla**
Coordinate with the college

**Reviewer: Steven Kovarik**
The engineering college has already started working on this as a universal project. ECpE had started this and expanded it to the whole college with an additional system being put into place with current year funding. Why are we requesting to house something in addition to what is already available.

If we are not meeting the needs currently with the system in place -- either hardware or software related we should have been informed.

**Reviewer: Don Schlagel**
why do we need yet another TS?

**Reviewer: Chris McCoy**

*Restrictions*
Combine with college TS strategy or do not fund.

*Comments*
This needs to be coordinated totally with the college or not at all -- no need to run multiple terminal servers across the college any more.
THE NEXT STEP IN ENGINEERING / DESIGN GRAPHICS: 3D SCANNING  FY08

Proposer: James Shahan / Alan Kuuttila / Raj Raman  
Department: ABE  
Status: Approved (conditions as outlined below)  
Requested Funding: $ 3,000  
Total Awarded: $ 3,000

Start Date: 7/2/2007  
End Date: 7/31/2007  
Project Description: Purchase a 3D Scanner from Next Engine Inc. Integrate this activity into Engineering and Technical Design/CAD classes.

Rationale: CAD software is continuing to integrate with other design / analysis activities. One of these is the ability to convert existing parts into a computer model by scanning. Using this technology in various design/CAD classes would provide a valuable experience for students. It is the first step in moving these classes to a state of the art “Concurrent Engineering Design” paradigm.

Proposed Solution: Purchase a 3D Scanner and related accessories from Next Engine Inc. Use that scanner to convert actual parts into a digital model that can be used with various computer programs (CAD/FEA). These models can then be used with several Design / Technical Graphics activities.

Seamless IT Compliance: This technology will be available to students during class times. As needed, access will made available to other classes and needs.

Impact to Education: The scanner will be used in the following classes during Fall 2007: AE 271 and 272, TSM 116 and TSM 216 (Appx. 120 students / semester). This is the first step in moving these classes to state of the art “Concurrent Engineering Design” paradigm. The use of this technology will be integrated into ENGR 170 as it moves toward this paradigm.

eCRT Restrictions: Report on use at the end of Fall 2007 - number of students, type of use, etc.

TOTAL PROPOSED $ 3,000

TOTAL AWARDED $3,000

The Next Step in Engineering / Design Graphics: 3D Scanning: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Important: Fund as Appropriate
Funding Recommendation: $ 3,000

Restrictions:
- Report on use at the end of Fall 2007 - number of students, type of use, etc.

**Reviewer: Chris McCoy**
Interesting and intriguing idea. Would be very cool for the college to have something like this.

**Reviewer: Don Schlagel**
This sounds like a neat project. If funding is available it should be considered.

**Reviewer: Steven Kovarik**
While I think it is important to keep cutting edge technologies in the lab environment, I am wondering if this is something that would be considered hardware and should be placed as a proposal on Tuition Surcharge.

If surcharge is not available I would look to fund if funding is available.
DUAL DISPLAYS FOR 134 TOWN

Proposer: Josh Klesel
Department: CCEE
Status: Approved (conditions as outlined below)
Requested Funding: $ 9,000
Total Awarded: $ 9,000

**Start Date:** 7/2/2007  
**End Date:** 7/30/2007  
**Project Description:** This project is simple - adding a secondary display to the existing computers in 134 Town.

**Rationale:** This project is to purchase dual displays in 134 Town Engineering. There are already dual displays in 210 and 220 Town and students have mentioned having dual displays is great for AutoCAD, Microstation, etc. Since 134 is used for instruction, LaDon Jones has made tutorials for his ENGR 170 class in which he has movies so the students can follow along. If the students have dual displays, they will be able to follow the instructional movies in real time, making the instruction all the more effective.

**Proposed Solution:** Since all of the labs were previously outfitted with expensive 20" monitors, I propose purchasing 22 19" monitors for 110 Town, and moving the existing 20" inch monitors to 134. Since 134 has 29 computers, the purchase of 7 additional 20" monitors will be needed to make up the difference.

- 22 19" monitors @ 279.64 = 6152
- 7 20" monitors @ 406.34 = 2844

**Seamless IT Compliance:** These facilities are available to all engineering students

**Impact to Education:** see rationale

**eCRT Restrictions:** Warranty needs to be matched with existing units.

**TOTAL PROPOSED** $ 9,000

**TOTAL AWARDED** $9,000

**Conditions:**
Warranty needs to be matched with existing units
Dual Displays for 134 Town: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Opportune: Fund as Available
Funding Recommendation: $ 9,000

Restrictions:
- Warranty needs to be matched with existing units.

*Reviewer: Don Schlagel*
- Seems like a good thing.

*Reviewer: Alan Kuutilla*
- I think the college needs to look at using dual displays in the computing labs.

*Reviewer: John Dickerson*
- Sounds reasonable, though some computer lab upgrades should probably get higher priority.

*Reviewer: Chris McCoy*
- Seems seriously ridiculous to purchase 20” monitors for nearly twice as much as 19” monitors. Why not find a way to rotate other 19” monitors in and make cost-effective purchases of only 19” monitors overall.

*Reviewer: Steven Kovarik*
- I understand the want but the need is another thing.
Proposer: Jim Wellman  
Department: AERE  
Status: Approved (conditions as outlined below)  
Requested Funding: $ 8,500  
Total Awarded: $ 8,500

| Start Date: | 6/30/2007 |
| End Date:   | 8/1/2007   |
| Project Description: | Add 21 20" displays to provide each workstation with dual monitors |
| Rationale:  | Useful for CAD and CFD work being done in the lab |
| Proposed Solution: | Add additional displays |
| Seamless IT Compliance: | These facilities are available to all engineering students |
| Impact to Education: | Provides students with the hardware suitable for running engineering applications |

| eCRT Restrictions: | Though 20" displays are costly, it does not make sense to split the lab. This facility should be used for scheduled courses from other departments. |

**TOTAL PROPOSED**  
$ 8,500

**TOTAL AWARDED**  
$ 8,500

**Conditions:**  
Purchase CoE standard; common access (use facility to schedule courses from all departments)
Howe 2344 monitor addition: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Opportune: Fund as Available
Funding Recommendation: $ 8,500

Restrictions:

Though 20” displays are costly, it does not make sense to split the lab. This facility should be used for scheduled courses from other departments.

**Reviewer: Alan Kuutilla**
Can 19” be used for dual monitors?

**Reviewer: Steven Kovarik**
Why 20 inch as opposed to 19 inch. Cost difference between the 2 is quite large and seems to be little gained by the minimal screen gain.

Only fund if major Capital projects are first funded and money is available.

**Reviewer: John Dickerson**
Should be considered after other more critical needs are met.

**Reviewer: Don Schlagel**
Cost of monitors is quite high compared to 19”

**Reviewer: Chris McCoy**
20” displays are almost twice as much as 19” displays. We need to carefully examine this to determine if the cost is justifiable. Seems imprudent to spend such an amount for a small addition of functionality.
LAB UPGRADE FOR 2264 HOOVER FY08

Proposer: Chris McCoy
Department: ECSS
Status: Approved (conditions as outlined below)
Requested Funding: $20,900
Total Awarded: $20,900

| Start Date:       | 6/1/2007 |
| End Date:         | 8/15/2007 |
| Project Description: | Replace CPU's on 19 stations (18 student stations and 1 instructor station) with moderately-powered systems. Use existing flat-panel LCD's. |
| Rationale:        | The equipment is currently 3-1/2 years old and warranty was extended through 10/08. The labs are used extensively year-round for teaching, unscheduled use, and special events. Classes are scheduled 32 hrs/week each semester. The lab is scheduled 100% during the month of June for orientation. Special events and other classes are scheduled in July. This lab supports classes in ENGR, ME, AERE, and ABE as well as others on request. |
| Proposed Solution: | The identified target system, such as similar to Dell Optiplex 745 SFF, 2-4GB RAM, price-point drive/cpu, upgraded graphics that can support dual-head displays (future opportunity) |
| Seamless IT Compliance: | These facilities are available to all engineering students |
| Impact to Education: | This lab is a flagship lab used for high-profile special events (orientation) as well as freshmen labs. Facilities must be functional, yet efficient. |

**eCRT Restrictions:**

| TOTAL PROPOSED | $ 20,900 |
| TOTAL AWARDED  | $20,900 |

**Conditions:**
Use standard CoE configuration; common access
Lab Upgrade for 2264 Hoover: eCRT Review Panel Comments

eCRT Panel Summary:
Proposal Priority Recommendation: Opportune: Fund as Available
Funding Recommendation: $ 20,900

Restrictions:

Reviewer: John Dickerson
The systems in this lab are candidates for upgrade but should be considered after other more critical needs are met.

Reviewer: Steven Kovarik, Alan Kuuttila, Don Schlagell
Should be done

Reviewer: Chris McCoy
This facility is used by sophomore and junior courses in ME and other departments as a CAD lab. The equipment has had trouble running several CAD packages during the 2006-2007 and needs to be upgraded to support these and other courses.
206 AND 290 TOWN ENGINEERING
CLASSROOM UPGRADE

Proposer: Josh Klesel
Department: CCEE
Status: Approved (conditions as outlined below)
Requested Funding: $12,850
Total Awarded: $1,500

| Start Date: | 6/1/2007 |
| End Date: | 6/30/2007 |

**Project Description:**
Rooms 206 and 290 Town sit empty for graduate level courses of ~20 because projecting equipment is not available. This causes the much larger rooms on the 2nd floor of Town which can hold 80 or more to be used, leading to a waste of resources.

**Rationale:**
Equipping these rooms with computers, projectors, etc. will increase the number of available "high-tech" classrooms to CCEE (and the college). Though these are University classrooms, they are heavily used by the CCEE department.

After talking with the former ITC, they would like to partner with the college on upgrading these rooms. If we supply the original equipment, FP&M will pay to install it and also refurbish the furniture in the room. After the initial purchase of the equipment, ITC will assume all maintenance, network and replacement costs associated with the rooms (except the computer and wireless mouse and keyboard).

**Proposed Solution:**
- 2 Projectors and mounts - $6,400
- 2 control systems - $3,268
- 2 electric projector screens - 1,400
- 2 VCR/DVD players - $250
- 2 Amplifiers - $800
- 2 sets of speakers - $700

**Seamless IT Compliance:**
These facilities are available to all engineering students

**Impact to Education:**
This will be increasing the amount of high-tech classrooms available to CCEE and the College.

**eCRT Restrictions:**
Limit EFTF funding to 1/2 cost of projectors (limit to $1500 models & coordinate across college); department covers remaining items and other 1/2. Installation cannot be included.

**TOTAL PROPOSED**
$12,850

**TOTAL AWARDED**
$1,500

**Conditions:**
Limit funding to ½ cost of projectors (limit of $1500; coordinate configuration with other CoE projectors). Department to cover cost of remaining items and other ½ of projector cost. Installation cost can not be included.
206 and 290 Town Engineering classroom upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $1,500

Restrictions:

Limit EFTF funding to 1/2 cost of projectors (limit to $1500 models & coordinate across college); department covers remaining items and other 1/2. Installation cannot be included.

**Reviewer: Steven Kovarik**
Looks like there are alot of things here that are not computing related. Some of this should be covered by department.

- 2 control systems - $3,268
- 2 electric projector screens - 1,400
- 2 VCR/DVD players - $250
- 2 Amplifiers - $800
- 2 sets of speakers - $700

**Reviewer: Jim Wellman**
Consider NEC 676E projector

**Reviewer: Chris McCoy**
While this isn't providing computers for education, it is providing technology for teaching. That's still a good thing, but it's important that we get our priority to fund "computing" first and foremost.

**Reviewer: Alan Kuutilla**
Should Dept. cost sharing be involved?

**Reviewer: John Dickerson**
There seems to be a lack of this type of facility in Town.

**Reviewer: Don Schlagel**
Should non-computing equipment be covered here? Due to budget constraints I would say not, even though the goal meets the spirit of EFTF.
Proposer: Bill Rickard  
Department: AERE  
Status: Approved (conditions as outlined below)  
Requested Funding: $26,840  
Total Awarded: $3,600

**Start Date:** 6/30/2007  
**End Date:** 8/1/2007  
**Project Description:** 3D CNC router, controller, and workstation to provide 3D computer aided design and manufacturing capabilities for prototyping models for wind tunnel and molds for composite structure manufacturing.

**Rationale:** This proposal will provide the necessary facilities to enable students to learn and practice fundamental CAD/CAM skills. In addition, it will add the capability to create 4'x5' 3D models to be used for wind tunnel simulations and molds to create composite models for structural testing.

**Proposed Solution:** Purchase the following items to be installed in 1385 Howe Hall and supervised and maintained by full time shop technician:

- 3D CNC router table with controller - $23,240  
- Workstation with 3D CAD capabilities - $3,600

**Seamless IT Compliance:** These facilities are available to all engineering students

**Impact to Education:** The following AerE courses will be directly impacted by this proposal:

- Design, Build and Test Structures and Systems 290/490  
- Aerodynamics 243L/343L, Aerodynamics 343L, Design of Aerospace Structures 426, Engineering Design Methods 461, Design of Aerospace Systems 462, AerE Senior Projects 499, Other engineering courses with design/build requirements

**eCRT Restrictions:** Guidance from EFTF is necessary to determine appropriateness. This appears to be something that is needed and is in the “gray” area for support – it is an output device, but it’s a modelling tool. It’s clearly on the fringe.

If department funds CNC router, EFTF should fund the workstation.

**TOTAL PROPOSED** $26,840

**TOTAL AWARDED** $3,600

**Conditions:**  
Funding workstation only; common CoE configuration. Department to fund CNC router.
3D CAD/CAM station: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $3,600

Restrictions:

- Guidance from EFTF is necessary to determine appropriateness. This appears to be something that is needed and is in the "gray" area for support -- it is an output device, but it's a modelling tool. It's clearly on the fringe.

- If department funds CNC router, EFTF should fund the workstation.

**Reviewer: Alan Kuutilla**
Does this equipment fall within the EFTF guidelines?

**Reviewer: Jim Wellman**
I view this technology no differently than a plotter or printer. It is a device that outputs a model created on the workstation. This technology is also tied to many of the expensive applications we are recommending to be funded including CATIA and MasterCAM.

CAC has funded similar proposals in the past, ex. 3D printer

This technology does not exist within the college.

**Reviewer: Don Schlagel**
Yeah, there's a computer attached, but this is only a computer controlled router system... not really within the bounds of eftf...

**Reviewer: John Dickerson**
There might be no systems of this type in the college, but this is not computer equipment

**Reviewer: Chris McCoy**
The router is not appropriate for EFTF funds. It's equipment, not a computer.

There's a comment that "no such facility exists within the college". Isn't there something like this in ABE as well as CIRAS?

This needs further investigation.

**Reviewer: Steven Kovarik**
While I think the project is probably needed in some form, I view this as hardware and not computing. This is something that should look for alternative funding. Tuition Surcharge may be a good place.

The computer and software is something that would be a portion that could be purchased on EFTF.
Proposer: Steven Kovarik  
Department: ECPE  
Status: Approved (conditions as outlined below)  
Requested Funding: $33,000  
Total Awarded: $17,000  

**Start Date:** 7/2/2007  
**End Date:** 10/31/2007  
**Project Description:** Replace computers for Linux which is 1/2 lab and computers for Windows which is the other 1/2 of this lab. 

Students have requested that the Linux lab machines have dual monitors in this lab as they can have the circuit design in one window and the simulation of the circuit in the other window helping them to see where issues are within their design.  

**Rationale:** Computers are out of warrantee. These systems are used in EE/CPrE 203/330/435/465/501 classes. The lab is now a 24 hour lab and is available to all students when the labs are not in use.  

**Proposed Solution:** Replace computers with computers decided by IT staff. Dual monitors if funding is available for Linux machines  

We will utilize the current GPIB boards for connecting to the test equipment on the Windows 1/2 lab so no new boards are needed in this lab replacement.  

**Seamless IT Compliance:** All college students when labs are not in use. This is a 24 hour lab  

**Impact to Education:** see above  

**eCRT Restrictions:** Purchase 10 new Linux systems w/ dual monitors, wait to upgrade new Windows systems when new building is open.  

**TOTAL PROPOSED** $33,000  

**TOTAL AWARDED** $17,000  

**Conditions:** Purchase 10 new Linux systems with dual monitors using CoE standard configuration; wait to upgrade new Windows systems when new building is open. Common access.
Coover 1212 Computer and printer Upgrade: eCRT Review
Panel Comments

*eCRT Panel Summary*
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $17,000

Restrictions:

Purchase 10 new Linux systems w/ dual monitors, wait to upgrade new Windows systems when new building is open.

*Reviewer: Chris McCoy*
I'd like to see greater explanation than simply "these machines are three years old". There is no way to determine if the existing equipment meets the needs or not and what the needs are. The comments about student requests are helpful, though.

*Reviewer: John Dickerson*
I've been in this lab many times. It's a zoo. It gets a ton of use. Anything to help the students be more productive in the lab is a good thing.

*Reviewer: Jim Wellman, Alan Kuutilla*
Appropriate

*Reviewer: Don Schlagel*
Seems like this is a no brainer... Students are asking specifically for some equipment.
Proposer: Chris McCoy, John Dickerson
Department: ECSS
Status: Approved (conditions as outlined below)
Requested Funding: $150,000
Total Awarded: $150,000

Start Date: 6/1/2007
End Date: 2/29/2008

Project Description: This project is the proposed kick-off for the college-wide computational grid. It is proposed that scheduling/managing software, a small HPC cluster, application software, and storage be considered for the start of a college grid. It will take 3-5 years for the grid to mature in stages each year that will progressively include more desktop systems with a target maximum of more than 600 nodes (desktops and clusters) on the grid. Researchers would be given the opportunity to buy into the solution and use intellectual capital gained through this development project.

This initial phase would implement the HPCC, existing compute servers, and up to 100 lab computers (Linux & Windows).

Rationale: Dean Kushner has charged the IT staff with developing a state-of-the-art computational grid for the college. This project is a realistic first step into a new paradigm of computing for the college in which students may begin to use a grid real-time as the first option.

Proposed Solution: The proposed solution includes the following items:
1. LSF (software); grid/job scheduler and resource manager for the grid for up to 200 "sockets"
2. A small HPC cluster (16 node, dual-cpu, dual-core, 8GB RAM, high-performance switch)
3. Grid-enabled versions (upgrades) of application software such as Matlab, Fluent, Cadence, Abaqus, Ansys, LS-Dyna, MPI code, and others as funding permits (costs are not determinate at this time)
4. Storage; solutions for connectivity to the HPCC (8-10TB) and the entire cluster

Seamless IT Compliance: These facilities are available to all engineering students

Impact to Education: Students and educators would gain access to computational facilities unlike anything available before. The types of problems that can be resolved will be greatly increased. Students and educators will gain access to modern computing techniques and resources.

eCRT Restrictions: Concerns:
- Can't differentiate sponsored research (SAME AS ALL OTHER RESOURCES)
- Not itemized (costs)
- Lack of clear substantial classroom use/demand
- Significantly increasing recurring expense
- other/matching funding sources?
- better cost estimate to be provided

TOTAL PROPOSED $150,000

TOTAL AWARDED $150,000

Conditions: Communicate and coordinate with Dean Kushner throught the various stages of implementation and acquisition.
ENGR GRID - PHASE I: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $150,000

Restrictions:

Concerns:

- Can't differentiate sponsored research (SAME AS ALL OTHER RESOURCES)
- Not itemized (costs)
- Lack of clear substantial classroom use/demand
- Significantly increasing recurring expense
- Other/matching funding sources?
- Better cost estimate to be provided

Reviewer: Don Schlager
Without this seed money this project will not grow.

Reviewer: Steven Kovarik
While I see the idea of what the dean is trying to accomplish, it seems like we have several areas that are competing for the money here. If we are going to do this we need to know how research funding will help in the building out of this functionality. Something like this could be used highly in upper class and I am assuming that research would not be given a free ride off of EFTF purchase such as this.

Look to outside funding from research that also deems this as appropriate for their use or restrict it to only class use.

Reviewer: Alan Kuutilla
Important for COE’s advancing computing environment

Reviewer: Chris McCoy
If we’re serious about GRID computing, this is the entry point. It’s pretty much now or never.

Reviewer: John Dickerson
I realize that there are lot of computer lab upgrade requests coming through this year, and naturally we need to make sure we have sufficient funds for them. But considering that there are *no* HPC facilities for the College of Engineering it seems a shame to go another year without this capability. We have close to a thousand desktop systems in the college and not one general purpose high-performance system. Since this proposal is intended to create a grid computing system available to the whole college, it should be given strong consideration.
Proposer: Mike Renze  
Department: IMSE  
Status: Approved (conditions as outlined below)  
Requested Funding: $15,000  
Total Awarded: $1,000  

**Start Date:** 7/1/2007  
**End Date:** 7/30/2007  
**Project Description:** Upgrade machines to Optiplex GX745  
**Rationale:** The machine in this room are three years old  
**Proposed Solution:** Upgrade to new ones  
**Seamless IT Compliance:** These facilities are available to all engineering students  
**Impact to Education:** Allow continuing upgrades to software and increase reliability  

**eCRT Restrictions:** extend warranty and resubmit next year  

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**TOTAL PROPOSED**  
$15,000  

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**TOTAL AWARDED**  
$1,000  

**Conditions:**  
Extend warranty and resubmit next year.
IMSE - Black 0010 upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $ 1,000

Restrictions:

extend warranty and resubmit next year

**Reviewer: John Dickerson**
This is not a high traffic lab and the equipment is only three years old. This upgrade should be postpone till next year. Warranties should be extended to cover the equipment.

**Reviewer: Don Schlagel**
Could the warranty be extended a bit longer on these machines? How many machines are being replaced? More information is needed.

**Reviewer: Steven Kovarik**
Not sure if the computers are currently not doing what is needed or if they are just being replaced due to warrantee. If out of warranted could that be extended.

**Reviewer: Jim Wellman, Alan kuutilla**
seems appropriate

**Reviewer: Chris McCoy**
I’d like to see greater explanation than simply “these machines are three years old”. There is no way to determine if the existing equipment meets the needs or not and what the needs are.
LAB UPGRADE FOR 2260 HOOVER

Proposer: Chris McCoy  
Department: ECSS  
Status: Approved (conditions as outlined below)  
Requested Funding: $22,400  
Total Awarded: $ 1,500

Start Date: 6/1/2007  
End Date: 8/15/2007  
Project Description: Replace CPU's on 19 stations (18 student stations and 1 instructor station) with moderately-powered systems. Use existing flat-panel LCD's.

Since there is a growing need/expectation for color printing in the college, a color laser is also needed in this lab.

Rationale: The equipment is currently 3-1/2 years old and warranty was extended through 10/08. The labs are used extensively year-round as an unscheduled, drop-in facility.

Students have been requesting throughout this year that color printing be available in this space.

Proposed Solution: The identified target system, such as similar to Dell Optiplex 745 SFF, 2-4GB RAM, price-point drive/cpu, upgraded graphics that can support dual-head displays (future opportunity)

Color laserjet - $1,500?

Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: This lab is a flagship lab used for high-profile special events (orientation) as well as freshmen labs. Facilities must be functional, yet efficient.

eCRT Restrictions: fund printer

TOTAL PROPOSED $ 22,400

TOTAL AWARDED $1,500

Conditions:  
Fund printer only.
Lab Upgrade for 2260 Hoover: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $1,500

Restrictions:
- fund printer

**Reviewer: Chris McCoy**
This equipment may be capable of waiting one more year. The facility is currently one of the highest printing locations in the college and students have requested color printing.

**Reviewer: Don Schlagell, Alan Kuutilla, Steven Kovarik**
Seems appropriate

**Reviewer: John Dickerson**
The systems are candidates for upgrade, but should be considered after other more critical needs are met.
Proposer: Chris McCoy
Department: ECSS
Status: Approved (conditions as outlined below)
Requested Funding: $64,220
Total Awarded: $3,400

**Start Date:** 6/1/2007  
**End Date:** 8/15/2007
**Project Description:** Replace 19 stations (18 student stations and 1 instructor station) with moderately-powered workstations. Current systems should be re-routed to other uses.
**Rationale:** The equipment is currently 3-1/2 years old and warranty was extended through 10/07. The labs are used year-round for teaching, unscheduled use, and special events, as well as graduate (unsponsored) research.
**Proposed Solution:** Dell Precision Workstation 490 MiniTower - 64bit; 4GB RAM, single dual-core 5160 CPU, dual-19" LCD's, nVidia 3450 @ ~$3380/ea
**Seamless IT Compliance:** These facilities are available to all engineering students
**Impact to Education:** Provides a nice facility for high-demand courses (upper-level and graduate) as well as unsponsored graduate research. Extended facility access is granted on a case-by-case basis for graduate students who wish to use the resources when the labs are closed to general traffic.

**eCRT Restrictions:** extend warranty for $3400

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**TOTAL PROPOSED** $64,220

**TOTAL AWARDED** $3,400

**Conditions:** Extend warranty only.
Lab upgrade for 2268 Hoover: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $ 3,400

Restrictions:
- extend warranty for $3400

**Reviewer: Alan Kuutilla**
Can these machines be put in a higher available/higher traffic area?

**Reviewer: Steven Kovarik, Don Schlagell**
Appropriate

**Reviewer: John Dickerson**
The systems in this lab are good candidates for upgrade. Because the typical use of this lab is for more advanced computing need applications, it would be nice to upgrade them to technology suitable for complex engineering applications (e.g. dual displays).

If the grid proposal is approved it is expected that these machines would be able to offload compute intensive jobs to the grid, thereby reducing the potential cost of these systems.

**Reviewer: Chris McCoy**
Coordinate with Howe 2228. See comments related.
**LAPTOPS FOR LECTURERS FY08**

Proposer: Jim Wellman  
Department: AERE  
Status: Not-Approved  
Requested Funding: $ 4,000  
Total Awarded: $ 0

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<thead>
<tr>
<th><strong>Start Date:</strong></th>
<th>6/30/2007</th>
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<tr>
<td><strong>End Date:</strong></td>
<td>8/1/2007</td>
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<tr>
<td><strong>Project Description:</strong></td>
<td>Provide laptops to lecturers teaching service courses</td>
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<tr>
<td><strong>Rationale:</strong></td>
<td>Provides a useful tool for presenting material in class</td>
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<tr>
<td><strong>Proposed Solution:</strong></td>
<td>Purchase two laptops</td>
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<td><strong>Seamless IT Compliance:</strong></td>
<td>These facilities are restricted</td>
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<tr>
<td><strong>Impact to Education:</strong></td>
<td>Used to improve the quality of education in service courses</td>
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| **eCRT Restrictions:** | EFTF Committee needs to determine appropriateness of this expenditure in light of all other needs. Should department fund resources specifically for the role of these staff?  |

**TOTAL PROPOSED**  
$ 4,000

**TOTAL AWARDED**  
$ 0
Laptops for lecturers: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $ 4,000

Restrictions:

> EFTF Committee needs to determine appropriateness of this expenditure in light of all other needs. Should department fund resources specifically for the role of these staff?

**Reviewer: Chris McCoy**
> The department should provide a laptop in lieu of a desktop computer if this is the resource needed to perform the functions of the job.

**Reviewer: Don Schlagel**
> Seems like a single laptop could be checked out for instructional purposes. Presentations could be prepared on instructors desktop systems. This does not need to be funded with eftf.

**Reviewer: Steven Kovarik**
> This is something that may be needed but maybe the department should be helping to fund this also as a cost of teaching the class. Should students be paying for a laptop that might be used for things other then teaching. A partial funding if department funds part should be looked into.

**Reviewer: Alan Kuutilla**
> Needs to be funded by dept. or lecturers

**Reviewer: John Dickerson**
> what the heck is this? Don't faculty have their own laptops any more? Someone's asking for students to pay for the faculty to get laptops??
## ME COURSE DEVELOPMENT MOBILE SYSTEMS

**Proposer:** Hap Steed  
**Department:** ME  
**Status:** Approved (conditions as outlined below)  
**Requested Funding:** $11,400  
**Total Awarded:** $0

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<tr>
<th><strong>Start Date:</strong> 7/1/2007</th>
<th><strong>End Date:</strong> 12/1/2007</th>
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**Project Description:** Create a mobile course development pack for faculty grad TA student checkout. This pack would include a tablet PC, quality wireless microphone system and software for developing class materials that can be saved to a streaming media server.  
@ 2600 each  
Support for a streaming media systems need also be included. Because the distant ed department already has such a system in place, it is proposed that they handle the storage of all media created for download. = @ $1000 as a trial basis

**Rationale:**  
Recreating the wheel is a waste of time. So is giving the same lecture over and over and over. This pack would allow a faculty members/grad TA, the ability to create lectures digitally using the tablet PC and audio equipment. There are three ME faculty presently experimenting with this concept. They are using borrowed equipment that need to be constantly returned. Having dedicated systems for this activity is a must in order to maximize ones time.

Students are very pleased with the ability to view class notes and lectures on line, any where, any time.

**Proposed Solution:** Purchase 4 Gateway PC Tablets, Shure wireless lapel systems, and software such as Camtasia.  
Open to ME on Experimental Basis First

**Seamless IT Compliance:** This system would allow the creation of lectures that could be view anytime by students. Having systems that can be checked out per semester to faculty/TA’s would allow them to work on the course development at a time that is convient to them - any time any place and not be limited by short time reservations of equipment. Because of the limited number of systems, during the initial trial period, it is recommended that his operation be limited to the ME departments only. If successful, it should be expanded to the entire college.

**Impact to Education:** The need is real. The question is whether or not EFTF or EDE should meet this need.

**eCRT Restrictions:** EFTF Committee needs to determine appropriateness of this expenditure in light of all other needs. Should department fund resources specifically for the role of these staff? The Dean needs to determine priority of this type of activity (on-line courses) and where is most appropriate to coordinate this -- EFTF, EDE, department.

Use existing tablets from CCEE.

The amount depends upon solution determined.

---

**TOTAL PROPOSED** $11,400  
**TOTAL AWARDED** $0
ME Course Development Mobile Systems: eCRT Review
Panel Comments

eCRT Panel Summary:
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $ 1

Restrictions:

The need is real. The question is whether or not EFTF or EDE should meet this need.

EFTF Committee needs to determine appropriateness of this expenditure in light of all other needs. Should department fund resources specifically for the role of these staff?

The Dean needs to determine priority of this type of activity (on-line courses) and where is most appropriate to coordinate this -- EFTF, EDE, department.

Use existing tablets from CCEE.

The amount depends upon solution determined.

Reviewer: Steven Kovarik
This is a questionable functionality that I think should be funded partially by the department to create modules.

ECpE is also working on this for faculty to checkout to create video modules freely available to all students to download when done, the difference here is we are purchasing with departmental funding.

This is an important feature set that should be used in course development but on a restricted basis until it is deemed appropriate. This would be along the same lines of what EDE is doing and we should look to their expertise to what is appropriate with respects to hardware and software.

Reviewer: Chris McCoy
Since this is a new startup, at best a small number of systems should be funded to determine how well the solution will work.

Reviewer: Alan Kuutilla
Funding should be covered by dept. or at a minimun shared.

Reviewer: Don Schlagel
Seems like if this is a pilot it could be tried on a smaller scale than this. Perhaps one or two tablets instead of 4.
Proposer: Hap Steed  
Department: ME  
Status: Approved (conditions as outlined below)  
Requested Funding: $16,100  
Total Awarded: $3,500

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<th>Start Date:</th>
<th>7/1/2007</th>
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<tr>
<td>End Date:</td>
<td>12/1/2007</td>
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**Project Description:**
- Replace 8 out of warranty computers - @ $1500
- Replace 6 year old video projector @ $2000
- Replace 10 year old printer @ $1500
- Purchase 1 new Axis 210 security camera $600

**Rationale:** Present systems are out of warranty, slow and have had various repairs over the past year. It is time to replace them.

**Proposed Solution:**
- Purchase systems that have dual core processor, 4 gig RAM, 256 meg ram on video card. Same make and model as 1012 Black as recommended by IT staff in college.  
- Purchase 1 Dell lcd projector  
- Purchase one HP printer, 4200 series . medium use printer  
- Add one Axis 210 security camera for security

**Seamless IT Compliance:** Used By ME 421 classes every day

**Impact to Education:** This lab is used to teach the ME 421 controls class. Aprox 120 students per semester take this class in sections of 10-12 students. The room is used almost every day, all day for the ME 421 class. It is closed at night.

**eCRT Restrictions:**
- Purchase new printer and projector -- standard college equipment. Use recycled computers for spares. Resubmit next year. Security camera to be added to college project.

**TOTAL PROPOSED**

| $16,100 |

**TOTAL AWARDED**

| $3,500 |

**Conditions:**
Purchase new printer and projector; use standard CoE configuration. Use recycled computers for spares. Resubmit proposal next year. Security camera to be added to a collaborated college project.
ME Black Room 0066 Upgrade: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $ 3,500

Restrictions:
- Purchase new printer and projector -- standard college equipment. Use recycled computers for spares. Resubmit next year. Security camera to be added to college project.

**Reviewer: Chris McCoy**
Camera to be part of college-wide study. Estimates for desktops is high.

**Reviewer: Steven Kovarik**
Look to eCRT for appropriate configuration. Move Camera to Central Camera Proposal solution.

**Reviewer: Don Schlagel**
Machine costs are high and cameras need to be moved to appropriate proposal.
MULTIMEDIA CENTER FOR ROOMS 3004-3006 BLACK FY08

Proposer: Hap Steed
Department: ME
Status: Approved (conditions as outlined below)
Requested Funding: $ 8,000
Total Awarded: $ 2,500

**Start Date:** 7/1/2007  
**End Date:** 12/1/2007

**Project Description:** Room 3004-3006 is used by personnel across the college for presentations, meetings, student group meetings, classes and defense presentations. The facility does not have any permanent media equipment installed. The room is jointly assigned to the ME and IMSE departments.

**Rationale:** Please note: This project was approved last year with EFTF, ME and IMSE splitting the cost 1/3 each. Because of unforeseen circumstances the project had to be put on hold this year, so it is being resubmitted this year.

**Proposed Solution:** ITC has suggested we install the following equipment: LCD projector mounted on ceiling, DVD/CD player, new screen, video switching system, and an audio system. All systems will have remote capabilities. The system will have internet access and be similar to the unit installed in 2028 Black.

A computer system from one of the replacement labs in Black will also be installed in room.

**Seamless IT Compliance:** Open to all by reservations through the ME and IMSE offices.

**Impact to Education:** This room supports all kinds of daily activities that are necessary to the success of the college. See project description above.

**eCRT Restrictions:** Use same decision from last year -- fund 50% of equipment (wiring and furniture can not be purchased). ME and IMSE will share remaining cost and schedule the facility.

**TOTAL PROPOSED** $ 8,000

**TOTAL AWARDED** $2,500

**Conditions:** Fund 50% of equipment (wiring and furniture can not be covered with EFTF funds). ME & IMSE will share remaining cost and schedule the facility.
Multimedia Center for Rooms 3004-3006 Black:  eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Questionable: Fund Partially  
Funding Recommendation: $ 2,500

Restrictions:

- Use same decision from last year -- fund 50% of equipment (wiring and furniture can not be purchased). ME and IMSE will share remaining cost and schedule the facility.

**Reviewer: Steven Kovarik**
DVD/VCR, screen, video switching and audio systems should be funded elsewhere.

**Reviewer: Chris McCoy**

*Restrictions*
Limit to $2500 or 50% (the smaller of the two) of the total cost of all fundable expenditures -- computer equipment, projector, etc. Wiring, furniture, etc., cannot be covered. Same conditions as last year apply.

*Comments*
For FY2007 this project was allocated $2500 because some costs could not be paid using EFTF funds. This project should be limited to that same amount using the same reasoning. There is no change that would justify any increase in funding.

**Reviewer: Don Schlagel**
This really should have been done last year when funds were more available. You're asking for more money than last year. Should be restricted to that amount.
Upgrade 2126 Sweeney Linux Lab FY08

Proposer: Don Schlagel
Department: CBE
Status: Approved (conditions as outlined below)
Requested Funding: $40,000
Total Awarded: $5,000

Start Date: 11/30/2007
End Date: 5/30/2008

Project Description: 12 Precision 650 workstations are 3.5 years old and will run out of their extended warranty in November.

Rationale: These workstations are currently used by CBE grads to complete coursework in CFD related classes, as well as some computation-related coursework. CBE would desire that these systems be added to the grid as it comes online to benefit everyone in the college.

Proposed Solution: At current costs for a current precision model we project a need of $40k to complete the replacement.

Seamless IT Compliance: These facilities have been restricted in the past, but once a locknetics lock has been installed they will be available to all ENGR students from 8-3 each weekday.

Impact to Education: Grad students utilize these systems heavily to perform required calculations and learn software packages for their coursework.

In addition, summer undergrad programs have utilized these heavily in the past.

eCRT Restrictions: Extend warranty for 1 more year.

TOTAL PROPOSED $40,000

TOTAL AWARDED $5,000

Conditions:
Extend warranty for 1 year.
eCRT Panel Summary:
Proposal Priority Recommendation: Questionable:Fund Partially
Funding Recommendation: $ 5,000

Restrictions:

Extend warranty for 1 more year.

Reviewer: Don Schlagel
These machines could be utilized one more year if some comparable machines from 2268 could be cannibalized for spare parts if needed. The warranty on these runs out in Nov. 2007

Reviewer: Chris McCoy
The equipment needs replaced, but the cost for the lab is high. The most effective solution needs to be examined.

Reviewer: Steven Kovarik
Fund with appropriate system by eCRT. Unless another alternative could be found these should be purchased.

Reviewer: John Dickerson
It is timely to replace these systems with more current technology. If the grid proposal is approved it might help reduce the overall performance required for these systems.
VIRTUALIZATION SERVER EXPANSION FY08

Proposer: Ben Vaughan
Department: ECSS
Status: Approved (conditions as outlined below)
Requested Funding: $8,200
Total Awarded: $4,100

Start Date: 7/1/2007
End Date: 9/5/2007

Project Description: The VMWare project from last year is starting to show its success. In order to keep moving in the right direction, a second “host” is needed to bring the project to a critical mass.

Rationale: This project would “virtualize” these existing servers onto two VMWare hosts:
- support.eng.iastate.edu
- jabber.engineering.iastate.edu
- home.eng.iastate.edu
- telnet.eng.iastate.edu
- print2.eng.iastate.edu
- watson.eng.iastate.edu
- zabbix.eng.iastate.edu
- nachos.eng.iastate.edu
- other new servers

Additionally, this solution allows sysadmins to bring up test and dev machines on an as-needed basis.

Proposed Solution:
- Dell 2950
  - Dual 5160 @ 3GHz and 1.333GHz bus
  - 8GB RAM @ 667MHz
  - RAID 1 2x36GB SAS system
  - RAID 5 3x146GB 15k SAS data
  ~$7200
- VMWare Virtual Infrastructure Basic (ESX Server 3.0)
  ~$1000 first year, then $400/yr for support after first year

Seamless IT Compliance:
These facilities are available to all engineering students

Impact to Education:
This allows for greater server resource utilization. Basically it allows us to do more with less. We are able to offer more services and a greater variety of services without having to bulk up on hardware.

eCRT Restrictions:
- use freed servers by the SAN project
- possibly purchase more memory for older servers
- cost sharing

TOTAL PROPOSED $8,200

TOTAL AWARDED $4,100

Conditions:
Use freed servers by SAN project (possibly purchase more memory for older server). Cost sharing.
Virtualization Server Expansion: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Questionable: Fund Partially
Funding Recommendation: $ 4,100

Restrictions:
- use freed servers by the SAN project
- possibly purchase more memory for older servers
- cost sharing

**Reviewer: Steven Kovarik**
This is becoming more and more the way of doing servers for small applications that do not need a full dedicated server.

**Reviewer: Don Schlagel**
This project needs to get funded to expand its capabilities. The initial investment in it last year was a good start and it is time to go to the next level.

**Reviewer: Chris McCoy**
In light of other needs, we to determine what benefit the students actually derive from this.

**Reviewer: Alan Kuutilla**
Important to the COE’s future computing environment
BUILDING A WORKSTATION OPEN LAB CLUSTER IN DAVIDSON HALL

Proposer: Raj Raman / Alan Kuuttila
Department: ABE
Status: Not-Approved
Requested Funding: $88,000
Total Awarded: $0

Start Date: 7/1/2007
End Date: 9/1/2007
Project Description: Build a small (16 computer) but powerful (Dell Precision 490 workstations) open lab in Davidson Hall. These machines will be added to the COE cluster. Use the displaced machines to improve the machines in IED II room 10 teaching lab.

Rationale:
To maintain an open student computing lab in Davidson to run high end engineering software, where it will be extremely useful to students in design projects who use computationally intensive software. Also, to add this computing lab to the COE computing cluster.

To capture the value in the existing year-old computers in Davidson by placing them in ABE teaching labs which currently have old machines (ca. Dell GX240s and older).

Proposed Solution:
Purchase and install 16 Dell Precision 490 workstations in room 125E Davidson Hall. Use high-speed connections (different proposal) to connect these machines to the COE cluster. Maintain 125E Davidson as an open lab (same as current status).

Distribute the 16 computers currently in 125E as follow:

13 to IED II room 10 (TSM 465, Lie Tang; AE404/504, SJ Hoff) to replace GX240’s
2 to 143 Davidson (Electric Power Teaching Lab - CJ Bern) to replace two GX240’s
1 to ABE IT staff (Alan K.) for use with Ghost and lab rebuilds

Seamless IT Compliance:
These facilities are available to all engineering students

Impact to Education:
This will allow students the use of high end computing for their student design projects (both in-class and extracurricular such as the 1/4-scale tractor team) and will also help to further the COE’s cluster computing initiative. At the same time, this will greatly improve the computers in two ABE teaching labs. This proposal is in lieu of a proposal we originally envisioned to purchase new machines for two teaching labs. We believe that by placing the cluster-worthy workstations in an open lab, we greatly increase the state of the art of COE educational facilities.

eCRT Restrictions:
Consider other options. Resubmit next year. Investigate different tools for FEA? Need to express the compelling need for this facility.

Need to address computer needs for 10 IED II.

TOTAL PROPOSED
$88,000

TOTAL AWARDED
$0
Building a Workstation Open Lab Cluster in Davidson Hall: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Imprudent: Do Not Fund
Funding Recommendation: $

Restrictions:

Consider other options. Resubmit next year. Investigate different tools for FEA? Need to express the compelling need for this facility.

Need to address computer needs for 10 I ED II.

**Reviewer: Don Schlagel**
Could some machines that are being replaced elsewhere be placed in here for the time being? I think the idea of some high-powered labs across the college is a good thing.

**Reviewer: Jim Wellman**
Can the lab support the power and heat load requirements for these systems?

**Reviewer: Chris McCoy**

*Restrictions*
No dollars allocated, but equipment relocated to accommodate the request.

*Comments*
Given that this is a new facility and that funding is tight this year, an alternative approach might be to move the workstations from 2268 Hoover to Davidson for FY2008. If the use merits, then this same proposal should be submitted again to purchase new equipment. The equipment from 2268 Hoover has warranty that was extended to five years and expires Nov, 2008.

**Reviewer: John Dickerson**
These are pretty powerful machines. I think we should weigh the cost of these machines against the grid computing proposal that seeks to provide a versatile cluster for the whole college. The grid cluster would provide a cluster of powerful machines with high-speed networking and storage, along with an advanced scheduler to improve system utilization and availability. All college HPC and computationally intensive applications will be provided on the cluster and will be available to all departments.

Provided the grid cluster proposal is approved, a less costly configuration for these machines makes sense.

**Reviewer: Steven Kovarik**
I would look to alternatives, looks like the machines are high configurations. Wonder if some of the work related to these systems could be offloaded to the College cluster systems thus resulting in a lesser configuration in the lab.
Proposer: Josh Klesel  
Department: ME  
Status: Not-Approved  
Requested Funding: $1,880  
Total Awarded: $0

| **Start Date:** | 5/1/2007 |
| **End Date:** | 6/30/2007 |
| **Project Description:** | Add the following cameras:  
ME – 2 camera Axis 210 - $440  
Camera recording software:  
ME – Netcam Watcher Pro 16 camera - $1,000 |
| **Rationale:** | Provides security for computer labs |
| **Proposed Solution:** | Purchase Netcam Watcher Pro license for new server in ME. Purchase 1 camera for ME. |
| **Seamless IT Compliance:** | These facilities are available to all engineering students. |
| **Impact to Education:** | More information needed. |

**eCRT Restrictions:** To be resolved by EFTF and Dean of Engineering

**TOTAL PROPOSED**  
$1,880

**TOTAL AWARDED**  
$0
College Camera Proposal: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Imprudent: Do Not Fund
Funding Recommendation: $

Restrictions:

To be resolved by EFTF and Dean of Engineering.

**Reviewer: Chris McCoy**
Imprudent: Do Not Fund

I believe until the college decides how to properly use monitoring cameras and how to coordinate the hardware and software solutions, this should not be funded. Also, with 60 labs, the number of cameras could easily mushroom to 120-200 cameras and would create an administration nightmare with additional liability issues.

I do not believe the real reason and value to students has been significantly communicated, nor has the appropriateness for using EFTF funds.

**Reviewer: Jim Wellman**
Critical: Fund Now

Cameras provide a powerful tool for ensuring that the large investment the college has made in open computer labs is protected. Since we are no longer paying lab monitors to watch labs, it is the only way we have to watch what goes on in the open labs at night and ensures the labs are being used as intended. It also allows us to keep labs open 24/7 which is a great benefit to students. Examples of activities that have been stopped as a result of camera footage review include: propping lab doors to bypass autolock mechanism, beer parties, pizza parties, bikes and dogs in the lab. By allowing us to identify and curb this type of behavior we are able to keep labs open at times when almost all other labs in the college are closed and we are able to keep these labs in excellent condition. To prevent use of cameras in areas where they are not warranted I recommend we all use common sense to select locations that are only worth the cost of monitoring. Small labs that do not have equipment worth the cost of monitoring with a camera should not be monitored this way.

**Reviewer: Steven Kovarik**
Imprudent: Do Not Fund

Cameras should only be used for security. Using them for management of labs is not a wise use of time or energy. Viewing of the data currently from cameras should only be done in departmental security of lab equipment.

**Don Schlagel**
Imprudent: Do Not Fund

There are enough cameras in use in the college. We do not need more cameras to aid in determining whether "shenanigans" are taking place in the lab or not.

**Josh Klesel**
Inappropriate: Fund Elsewhere

These cameras are used outside of the realm of "security cameras" and therefore should not be funded by EFTF.
Cooover Plotter Replacement

Proposer: Steven Kovarik  
Department: ECPE  
Status: Not-Approved  
Requested Funding: $20,000  
Total Awarded: $0

Start Date: 7/2/2007  
End Date: 10/31/2007

Project Description: Current plotter is used for printing of posters relating to undergraduate classes, Senior design and student research related to classes or the pursuit of graduate degrees.

Rationale: Current plotter is 10 years old and is restricted in its ability. With the increase of the use of high graphics on posters our ability to correctly print these graphics is severely restricted. This plotter will allow for increased sizes to 60" width which has been requested. Current plotter will only create 32" plots.

Proposed Solution: Replace with higher capability plotter.

Seamless IT Compliance: These facilities are restricted

Impact to Education: We currently print well over 100 poster size plots for Senior Design 100 for graduate students. All students in ECPE would need to request computer support to print posters so we can regulate the use to only educational use.

eCRT Restrictions: Use printing services or use 48" plotters in other departments

TOTAL PROPOSED $20,000

TOTAL AWARDED $0
Coover Plotter Replacement: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Imprudent: Do Not Fund
Funding Recommendation: $

Restrictions:
- Use printing services or use 48” plotters in other departments

**Reviewer: Chris McCoy**
Opportune: Fund as Available

This is an expensive replacement. We need to make sure there is balance between need and solution.

**Reviewer: Don Schlagel**
Opportune: Fund as Available

Plotters should be updated to maintain current standards of graphics needed

**Reviewer: John Dickerson**
Opportune: Fund as Available

Given the number of plots, would the department consider sharing this with other departments? Is all of the use of the system related to academics? Do researchers contribute any money to the cost?
Proposer: Jim Wellman  
Department: AERE  
Status: Not-Approved  
Requested Funding: $1,000  
Total Awarded: $0

| **Start Date:** | 6/30/2007 |
| **End Date:**   | 8/1/2007   |
| **Project Description:** | Palm and software to program Locknetics locks |
| **Rationale:**   | Provide a method to easily program lab locks |
| **Proposed Solution:** | Purchase a palm and software |
| **Seamless IT Compliance:** | These facilities are restricted |
| **Impact to Education:** | Enable labs to be locked and unlocked |

**eCRT Restrictions:** Try to coordinate a south-zone solution for next fiscal year.

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<tr>
<th><strong>TOTAL PROPOSED</strong></th>
<th>$1,000</th>
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<td><strong>TOTAL AWARDED</strong></td>
<td>$0</td>
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</table>
Door programming tools: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Imprudent: Do Not Fund  
Funding Recommendation: $

Restrictions:

Try to coordinate a south-zone solution for next fiscal year.

**Reviewer: Alan Kuutilla**
Can't a laptop be used for this?

**Reviewer: Chris McCoy**
Are the programmed doors only student computing labs or do they represent other computer labs and non-student facilities, too? Perhaps this should be cost-shared with the department.

Also, if we're going to fund this via EFTF, we need a better cross-college solution to door programming. It doesn't seem to make sense to buy programming tools for each area.

**Reviewer: Steven Kovarik**
This type of system is becoming more important as the locks in labs are converted to locknetics that are programmable. However, there is a laptop software that is available at a fraction of the cost of this request. The handheld unit is nice but is it really needed to get the functionality.

The department should help with funding if the unit is used for doors other than the labs.

Hap also has one of these units. Since the doors are programmed and left to work, Would it be possible to share with other departments that already have the tools.

**Reviewer: Don Schlagel**
Tools already exist in the college, why must we duplicate?

**Reviewer: John Dickerson**
This would be shared across the college, right? We only need one door programming kit for the college.
Proposer: Chris McCoy
Department: ECSS
Status: Not-Approved
Requested Funding: $ 20,900
Total Awarded: $ 0

Start Date: 6/1/2007
End Date: 8/15/2007

Project Description: Replace CPU's on 19 stations (18 student stations and 1 instructor station) with moderately-powered systems. Use existing flat-panel LCD's.

Rationale: The equipment is currently 3-1/2 years old and warranty was extended through 10/08. The labs are used extensively year-round for teaching, unscheduled use, and special events. Classes are scheduled 32 hrs/week each semester. The lab is scheduled 100% during the month of June for orientation. Special events and other classes are scheduled in July.

Proposed Solution: The identified target system, such as similar to Dell Optiplex 745 SFF, 2-4GB RAM, price-point drive/cpu, upgraded graphics that can support dual-head displays (future opportunity)

Seamless IT Compliance: These facilities are available to all engineering students

Impact to Education: This lab is a flagship lab used for high-profile special events (orientation) as well as freshmen labs. Facilities must be functional, yet efficient.

eCRT Restrictions:

TOTAL PROPOSED $ 20,900

TOTAL AWARDED $ 0
Lab Upgrade for 2255 Hoover: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Imprudent: Do Not Fund
Funding Recommendation: $

Restrictions:

**Reviewer: John Dickerson**
The systems in this lab are candidates for upgrade but should be considered after other more critical needs are met.

**Reviewer: Chris McCoy**
This equipment will be 4 years old Oct 2007, but may still be usable for one more year.

**Reviewer: Steven Kovarik**
The systems are currently on extended warrantee and should be replaced

**Reviewer: Don Schlagell, Alan Kuutilla**
Seems appropriate
# LAB UPGRADE FOR 3337 HOOVER  
## FY08

Proposal: Josh Klesel  
Department: MSE  
Status: Not-Approved  
Requested Funding: $25,300  
Total Awarded: $0

| Start Date: | 6/1/2007 |
| End Date: | 6/30/2007 |
| **Project Description:** | Replace aging computers in 3337 Hoover. |
| **Rationale:** | The equipment is currently 3-1/2 years old and warranty was extended through 10/08. The labs are used extensively year-round for teaching, unscheduled use, and special events. |
| **Proposed Solution:** | 23 new Dell Optiplex 745 SFF - $25,300 |

**Seamless IT Compliance:** These facilities are restricted  
**Impact to Education:** This lab is primarily used for MSE students to do their coursework.

### eCRT Restrictions:

| TOTAL PROPOSED | $25,300 |
| TOTAL AWARDED | $0 |
Lab upgrade for 3337 Hoover: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Imprudent: Do Not Fund
Funding Recommendation: $

Restrictions:

**Reviewer: John Dickerson**
This lab is a good example of how a good synergy can exist between learning and computing. This lab should be upgraded to modernize the technology and to acknowledge the value this lab has to the MSE learning experience.

**Reviewer: Chris McCoy**
Facility is heavily used, although limited in access.

**Reviewer: Steven Kovarik, Don Schlagell**
Appropriate

**Reviewer: Alan Kuutilla**
Why is this facility restricted?
Proposer: Hap Steed  
Department: ME  
Status: Not-Approved  
Requested Funding: $ 6,000  
Total Awarded: $ 0  

Start Date: 7/1/2007  
End Date: 12/1/2007  
Project Description: Upgrade 4 computer systems @ $1500  

Rationale: Systems are out of warranty  
Proposed Solution: Purchase systems that have dual core processor, 4 gig RAM, 256 meg ram on video card, similar to those purchase for other open computer labs in Black (1012, 0083)  

Seamless IT Compliance: These facilities are available to all engineering students  
Impact to Education: This is a open computer lab for general use. It is located just across from the ME \IMSE media and ME advising center. It will host all the off the top software in addition to hosting special media software dealing with graphic operations, still and motion (Photoshop, Adobe Illustrator, Studio 10 ect). It is also used by the ME learning community study groups and advising center for quick access by students to their grad planner progress. It is the only open lab on the second floor of Black and there for critical to these operations.  

eCRT Restrictions: Wait for next year -- resubmit or identify newer equipment to rotate into this facility.  

TOTAL PROPOSED $ 6,000  

TOTAL AWARDED $0
ME Black 2070 Computer lab: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Imprudent: Do Not Fund
Funding Recommendation: $

Restrictions:

Wait for next year -- resubmit or identify newer equipment to rotate into this facility.

**Reviewer: Chris McCoy**

*Restrictions*
Follow college standard.

*Comments*
Systems should follow college desktop standard.

**Reviewer: Don Schlagel**

standardize

**Reviewer: Steven Kovarik**

Look to eCRT for appropriate machines.

**Reviewer: John Dickerson**

Considering the demand for funding this year, it would be nice to know the priority the department places on this upgrade relative to the other requests.
ME BLACK 2081 INSTRUMENTATION
LAB UPGRADE

Proposer: Hap Steed
Department: ME
Status: Not-Approved
Requested Funding: $ 9,600
Total Awarded: $0

Start Date: 7/1/2007
End Date: 12/1/2007
Project Description: Upgrade 6 computer systems @ $1500.00
One security camera @ $600.00

Rationale: All computer systems are out of warranty. This computer lab does not have a security camera. It will provide extra protection against theft.

Proposed Solution: Purchase systems that have dual core processor, 4 gig RAM, 256 meg ram on video card. Same brand and model purchased for 1012 Black
Purchase on Axis 210 security camera.

Seamless IT Compliance: Used Daily for ME 370 classes - closed at night
Impact to Education: This room housed the ME 370 course. A requires instrumentation class. 120 plus students in lab sections of 12 used this facility every week occupying it almost all day every day during normal business hours.

eCRT Restrictions: Keep running using recycled equipment for spares/parts.

TOTAL PROPOSED $ 9,600

TOTAL AWARDED $0
**ME Black 2081 Instrumentation Lab Upgrade: eCRT Review Panel Comments**

**eCRT Panel Summary:**
Proposal Priority Recommendation: Imprudent:Do Not Fund
Funding Recommendation: $

Restrictions:
- Keep running using recycled equipment for spares/parts.

**Reviewer: Chris McCoy**
Camera to be part of college-wide study on security. Costs of desktops is high.

**Reviewer: Don Schlagel**
Cameras to new cap project... standardize machine specs.

**Reviewer: Steven Kovarik**
Look to eCRT for appropriate configuration. Camera should go on central Camera project.

**Reviewer: John Dickerson**
The estimate for the cost of the systems in this proposal seems high.
ME BLACK SMALL TEACHING LAB
UPGRADE FY08

Proposer: Hap Steed
Department: ME
Status: Not Approved
Requested Funding: $11,700
Total Awarded: $0

Start Date: 1/7/2007
End Date: 12/1/2007
Project Description:
Upgrade 13 computers in:
Heat Transfer lab room 1118 Black 3 @ ~$1500
Fluids Lab room 1119 Black 3 @ ~ $1500
Technician system for all labs 1@ ~$1500
Printer for Technician @ ~ $1200

Rationale:
All computers are out of warranty including a 10 year old printer.

Proposed Solution:
Purchase systems that have dual core processor, 4 gig RAM, 256 meg ram on video card. Systems similar to those proposed for the open computer lab 1012 and 0083 Black.

Seamless IT Compliance:
These facilities are restricted

Impact to Education:
All of these lab service required courses in the ME program such as ME 436 Heat Transfer, Fluids ME 335 and Instrumentation ME 370. The rooms are busy just about every day all day throughout the semester.

eCRT Restrictions:
Use a recycled printer. Use recycled computers for spares. Resubmit next year.

TOTAL PROPOSED
$11,700

TOTAL AWARDED
$0
ME Black Small Teaching lab upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Imprudent: Do Not Fund
Funding Recommendation: $

Restrictions:

Use a recycled printer. Use recycled computers for spares. Resubmit next year.

**Reviewer: Don Schlagel**
sys admin machine should not be in here... machine costs are high.

**Reviewer: Steven Kovarik**
Another systems administrator system. I must not be understanding what is going on. This is like the third systems administrator that I have seen on a configuration. Look to eCRT for appropriate configurations.

**Reviewer: Chris McCoy**
Computer and printer for system administrator should not be part of this request. Look for opportunity to repurpose existing equipment.
ME HOOVER 1360 MECHATRONICS LAB FY08

Proposer: Hap Steed  
Department: ME  
Status: Not Approved  
Requested Funding: $12,000  
Total Awarded: $0

Start Date: 7/1/2007  
End Date: 12/1/2007  
Project Description: Upgrade 8 computer systems with current systems.  
Rationale: Units are out of warranty, slow and need replaced.  
Proposed Solution: Purchase systems that have dual core processor, 4 gig RAM, 256 meg ram on video card. Similar to those proposed for 1012 Black.  
Seamless IT Compliance: These facilities are restricted  
Impact to Education: This room has joint ownership between ME and Ag-Bio.  
It housed the Caterpillar hydraulic trainers center. Various classes meet in this room including but not limited to ME 410 and Engineering 170.

eCRT Restrictions: Use recycled computers for spares. Resubmit next year.

TOTAL PROPOSED $12,000

TOTAL AWARDED $0
ME Hoover 1360 Mechatronics Lab: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Imprudent: Do Not Fund
Funding Recommendation: $

Restrictions:
- Use recycled computers for spares. Resubmit next year.

**Reviewer: Don Schlagel**
- what specs are needed for the machines? Could older machines be re-purposed?

**Reviewer: Steven Kovarik**
- Would machines from another lab be appropriate for a few years as we get a handle on some of the systems.

**Reviewer: Chris McCoy**
- Can existing computers be repurposed for this use? This seems to have a highly specific need.
COOVER 1212 O-SCOPE UPGRADE FY08

Proposer: Steven Kovarik
Department: ECPE
Status: Not Approved
Requested Funding: $40,000
Total Awarded: $0

Start Date: 7/2/2007
End Date: 10/31/2007

Project Description:
The proposal is to replace the oscilloscopes in the Electronics Devices and Circuits Laboratory – Room 1212 Coover Hall. The present equipment is at least 12 years old, and no longer sufficient for high speed digital measurements.

This is a heavily utilized laboratory. All electrical and computer engineering students have a three hour lab in the room, EE 230, (about 45 hours per semester). Other classes that also have three hours labs include EE330, EE331, EE435, and EE501. Also, this lab is the only open electronics lab in the College of Engineering that is open 24 a day.

The approximate cost of the equipment replacement will be about $40000 on the twelve lab benches and two spare sets. This would be a one-time replacement of equipment, and all the oscilloscopes should be replaced at the same time. The price estimate does not include possible discounts or gifts, but the discounts may depend on the size of a purchase at any one time.

Rationale:
The laboratory supports EE 230 Circuits and Systems in Electronics, EE 330 Integrated Electronics, EE 435 Analog VLSI Circuit Design, EE 501 Analog and Mixed-Signal VLSI Circuit Design Techniques, and EE 331 which is in development. Each student taking one of these courses will spend at least 45 hours per semester in the lab. This electronics laboratory is also open to all students in the College of Engineering, and it is open 24 hours per day.

The justification of the project is to update the equipment in the lab – to allow students to use equipment similar to what they might find in industry during internships and following graduation.

It has been suggested that the equipment now in the lab, be used in a lending library which could benefit a large number of engineering students in various departments.

Last year the department made a survey of students in the department (ECpE students), but they did not ask the students to individually identify themselves. The survey listed several possible uses of Tuition Surcharge money. The students were asked to make comments on each of the possible uses. The following are some of the comments by students from the survey:

“Using equipment that doesn’t reflect that used in industry does nothing but hinder future successes.”

“Now is a bad time to tell me the equipment I learned on was very outdated.”

“It bothers me that this undertaking has not taken place sooner.”

“The lab equipment as well as the lab locations need to be updated very badly.”

Proposed Solution:
The approximate cost of the equipment replacement will be about $30000 on the twelve lab benches and two spare sets. This would be a one-time replacement of equipment, and all the oscilloscopes should be replaced at the same time. The price estimate does not include possible discounts or gifts, but the discounts may depend on the size of a purchase at any one time.

Seamless IT Compliance:
Open to all when labs are not in use by a class

Impact to Education:
It has been suggested that the equipment now in the lab, be used in a lending library which could benefit a large number of engineering students in various departments.

Last year the department made a survey of students in the department (ECpE students), but they
did not ask the students to individually identify themselves. The survey listed several possible uses of Tuition Surcharge money. The students were asked to make comments on each of the possible uses. The following are some of the comments by students from the survey:

“Using equipment that doesn’t reflect that used in industry does nothing but hinder future successes.”
“Now is a bad time to tell me the equipment I learned on was very outdated.”
“It bothers me that this undertaking has not taken place sooner.”
“The lab equipment as well as the lab locations need to be updated very badly.”

<table>
<thead>
<tr>
<th>eCRT Restrictions:</th>
<th>There is no doubt these are needed, but seem inappropriate for EFTF.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL PROPOSED</strong></td>
<td>$40,000</td>
</tr>
<tr>
<td><strong>TOTAL AWARDED</strong></td>
<td>$0</td>
</tr>
</tbody>
</table>
Coover 1212 O-Scope Upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Inappropriate: Fund Elsewhere
Funding Recommendation: $

Restrictions:

There is no doubt these are needed, but seem inappropriate for EFTF.

**Reviewer: Chris McCoy**
There's no doubt that this equipment needs replaced. But, it's simply technology used in a course. Every course in engineering that uses technology is no different, whether an engine, chemical lab, etc. We should be very careful to keep this as close to computing as possible.

**Reviewer: Alan Kuutilla**
Does this equipment fall within the EFTF guidelines?

**Reviewer: Don Schlagel**
no approriate within eftf

**Reviewer: John Dickerson**
The O-scopes in that room definitely needs to be upgraded, but this funding this type of equipment is not usually permitted by EFTF. Though I'm sure if students could decide they wouldn't object to spending EFTF money on new units.
COOVER 1301 INTRO TO EMBEDDED SYSTEMS FY08

Proposer: Steven Kovarik
Department: ECPE
Status: Not Approved
Requested Funding: $16,000
Total Awarded: $0

Start Date: 7/2/2007
End Date: 10/31/2007
Project Description: The lab's current embedded systems hardware is fast becoming obsolete and is no longer grasping the students' imagination to further their education. The TechBot embedded systems allow the students to advance their learning and expand their imagination with current technology that can be used throughout their tenure.

Rationale: Embedded systems is a current and cutting-edge technology that is around us everyday in hardware like cellular phones, wireless communications, PDA's, MP3 players, etc... This change in lab technology will help students advance into this medium quickly.

Proposed Solution: Replacement of current Embedded systems with TechBot embedded system or equal alternative and connection cabling and software. Approximately costs per station is $800 with the need for 20 stations.

Seamless IT Compliance: These facilities are restricted
Impact to Education: See rational.

eCRT Restrictions: This seems critical to the needs of the course, but appears to be outside the scope of EFTF. This is a clear need without a home for funding.

TOTAL PROPOSED $16,000

TOTAL AWARDED $0
Coover 1301 Intro to Embedded Systems: eCRT Review Panel Comments

*eCRT Panel Summary:*  
Proposal Priority Recommendation: Inappropriate:Fund Elsewhere  
Funding Recommendation: $

Restrictions:  
This seems critical to the needs of the course, but appears to be outside the scope of EFTF. This is a clear need without a home for funding.

**Reviewer: John Dickerson**  
This seems like an important class. Considering the demand for funding it would be nice to know what priority the department would assign this project relative to the other departmental requests.

**Reviewer: Don Schlagel**  
important to stay on top of current trends.

**Reviewer: Alan Kuutilla**  
Should dept. help with cost sharing?
Proposer: Jim Wellman  
Department: AERE  
Status: Not Approved  
Requested Funding: $ 5,500  
Total Awarded: $0  

Start Date: 6/30/2007  
End Date: 8/1/2007  
Project Description: Install information display in front of main office  
Rationale: Contingent on CAC proposal acceptance.  
Proposed Solution: Installation as outlined in Table 2. of CAC proposal.  
Seamless IT Compliance: These facilities are available to all engineering students  
Impact to Education: Improves the dissemination of information to students  
eCRT Restrictions: Departments should be funding this.  

TOTAL PROPOSED $ 5,500  

TOTAL AWARDED $0
Digital signage for main office: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Inappropriate:Fund Elsewhere
Funding Recommendation: $

Restrictions:

Departments should be funding this.

*Reviewer: Chris McCoy*
Seems like the department should be paying for this and not ask the students to pay for it.

*Reviewer: Alan Kuutilla*
This is not appropriate for EFTF funds.

*Reviewer: John Dickerson*
Somebody explain to me how digital signage should even be considered to be paid for by student computer fees or CAC fees. If the dean/departments/student services groups don't think enough of this to put in their budget, why should students be expected to pay for it?

*Reviewer: Don Schlagel*
This should be a departmental cost.

*Reviewer: Steven Kovarik*
While dissemination of information is needed, I look at this as a priority for the department and not necessarily for the EFTF fee. If funded we should be looking at this across the College and not just in one area. Maybe the college would like to take this on as a universal project to be coordinated with the CAC proposal if funded.
DURHAM ANTENNA/MICROWAVE LABS UPGRADE

Proposer: Jiming Song and Robert Webber
Department: ECPE
Status: Not Approved
Requested Funding: $90,000
Total Awarded: $0

Start Date: 7/1/2007
End Date: 10/31/2007

Project Description:
There are urgent needs to upgrading antenna/microwave labs because major equipments are about 40 years old and the equipment is beyond repair if it fails. We estimate that totally 90K is needed. We request funds from EFTF, supplementary funds, or others.

Rationale:
The antenna/microwave labs have served undergraduates/graduate students in courses such as EE414/514, EE417/517, EE/CPrE418 and various EE501’s.

Major equipment in the antenna lab are about 40 years old as shown in Table 1. All of them are analog device and calibrated manually. Paper is still used to record the antenna patterns. Due to the age of the equipment and length of time for manual calibration, most lab assignments are run by the TA like a demonstration. The students cannot do many adjustments or changes in the measurements. They just have antenna patterns on paper to analyze.

Table 1: Purchased date for key equipment used in the antenna lab.

<table>
<thead>
<tr>
<th>Model</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific-Atlanta Series</td>
<td>1530</td>
</tr>
<tr>
<td></td>
<td>Purchased in 1968</td>
</tr>
<tr>
<td>Polar recorder series 1530</td>
<td>1968</td>
</tr>
<tr>
<td>Positioner control-unit</td>
<td>1968</td>
</tr>
<tr>
<td>Antenna positioner</td>
<td>1968</td>
</tr>
<tr>
<td>Crystal boltometer</td>
<td>1965</td>
</tr>
<tr>
<td>Klystron Power supply</td>
<td>1974</td>
</tr>
<tr>
<td>Frequency meter (HP X532)</td>
<td>1966</td>
</tr>
<tr>
<td>Anechoic chamber</td>
<td>1998</td>
</tr>
</tbody>
</table>

Some of these pieces of equipment were used by Professor Weber when he took a senior course in electro-magnetics in the mid 60’s. The equipment was old then. We are in the process of augmenting this old equipment with a network analyzer but the network analyzer available is used for EE414/514(HP8753C) and it also is almost twenty years old and is failing. The display is barely visible and new displays are not available.

Proposed Solution:
We request a fund of 90K to upgrade the antenna/microwave labs. A key instrument is an Agilent network analyzer (up to 18 GHz), which costs about 50K to 60K after educational discount. The network analyzer is the most important device, which can generate a microwave signal up to 18 GHz, do the calibration automatically, measure the vector (both amplitude and phase) reflection and transmission, and display and output results digitally. An antenna measurement system, which costs about 20K, is also needed as a platform for the antenna measurements.

Seamless IT Compliance: These facilities are restricted
Impact to Education:

EE414/514: Microwave engineering, 25/year

EE417/517: Electromagnetic radiation, antennas, and wave propagation, 30/year

EE/CPrE418: High speed systems, 20/year

EE512: Advanced electromagnetic field theory, 10/year

EE311: Electromagnetic fields and waves, (the lab is used for demo), 100/year
**eCRT Restrictions:** Should be done, but EFTF is not the appropriate funding source.

<table>
<thead>
<tr>
<th>TOTAL PROPOSED</th>
<th>$ 90,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL AWARDED</td>
<td>$0</td>
</tr>
</tbody>
</table>
Durham Antenna/Microwave Labs Upgrade: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Inappropriate: Fund Elsewhere
Funding Recommendation: $

Restrictions:

Should be done, but EFTF is not the appropriate funding source.

**Reviewer: Alan Kuutilla**
Inappropriate for EFTF funds

**Reviewer: Don Schlagel**
Seems like WAY off base from EFTF guidelines to me.

**Reviewer: John Dickerson**
wow. This is some old equipment! But it's just not computer related. This would be comparable to asking EFTF to fund a wind tunnel or a chemical process lab.

**Reviewer: Chris McCoy**
This is completely inappropriate for EFTF funds. It should not have been submitted.
**IMSE AND ME - VIDEO CONFERENCING CAPABILITIES IN 3035 BLACK (ME & IMSE)**

Proposer: Frank Peters  
Department: IMSE  
Status: Not Approved  
Requested Funding: $8,180  
Total Awarded: $0  

| **Start Date:** | 7/1/2007 |
| **End Date:** | 8/15/2007 |

**Project Description:**  
Install DVD VCR combo, 52” Plasma display, Polycom Video conferencing software, and phone service

**Rationale:**  
Video conferencing capability to be installed in 3035 Black for Shared use by IMSE and ME. This will support Student-Industry collaboration. Existing collaboration includes IE 441 and ME 415 senior capstone design projects, IE 361 Class Projects, international lean manufacturing collaboration with Deere and Caterpillar. This will also be used for the required internationalization component in IE 341 where students are working on project groups with members from international universities.

**Proposed Solution:**  
Upgrading facility to enhance ability to communicate effectively with industry partners in US and worldwide

**Seamless IT Compliance:**  
These facilities are restricted

**Impact to Education:**  
This will allow students to have viable video conferencing facilities to communicate with design partners in industry. Also useful for international educational process such as IE 421X International Kaizen. This will enhance the ongoing required internationalization component of a required course.

**eCRT Restrictions:**  
Contact EDE

**TOTAL PROPOSED**  
$8,180

**TOTAL AWARDED**  
$0
IMSE and ME - Video Conferencing capabilities in 3035 Black (ME & IMSE): eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Inappropriate: Fund Elsewhere
Funding Recommendation: $

Restrictions:
Contact EDE

**Reviewer: Chris McCoy**
This doesn’t seem to fit, given the other pressing needs.

**Reviewer: Steven Kovarik**
52 inch plasma, is this really needed. The software is unclear, is this a Polycom system and conferencing software together. DVD/VCR is not computing and should be funded elsewhere. A breakdown of what the costs are would be greatly appreciated.

**Reviewer: John Dickerson**
This is definitely a luxury when compared against the more critical needs of academic computing.

**Reviewer: Don Schlagel**
This sounds interesting, but I don’t see how it is beneficial to enough students to weigh heavily this year in light of the tight funding availability.
# Laptop Computers for Graduate Students

**Proposer:** Eric Cochran  
**Department:** CBE  
**Status:** Not Approved  
**Requested Funding:** $30,000  
**Total Awarded:** $0

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Start Date:</strong></td>
<td>8/15/2007</td>
</tr>
<tr>
<td><strong>End Date:</strong></td>
<td>8/14/2008</td>
</tr>
<tr>
<td><strong>Project Description:</strong></td>
<td>This proposed allocation of computing fees would be used to purchase laptop computers for first-year graduate students in CBE, as a pilot program that would be expanded to COE in subsequent years if deemed successful.</td>
</tr>
<tr>
<td><strong>Rationale:</strong></td>
<td>Graduate students are responsible for compiling data, writing publications, and giving public presentations. These tasks all require convenient access to centralized computational facilities---the most productivity is realized only when data is immediately available.</td>
</tr>
<tr>
<td><strong>Proposed Solution:</strong></td>
<td>As a pilot program, CBE will purchase laptops for its incoming graduate class. Students will sign a lease agreement allowing them to administer their own computer, releasing the university from service/support and liability, and binding them to the Acceptable Use policy. If adopted COE-wide, the volume of computers purchased annually should qualify for more competitive pricing.</td>
</tr>
<tr>
<td><strong>Seamless IT Compliance:</strong></td>
<td>In the pilot year this would be restricted to CBE, expanding to COE if successful</td>
</tr>
<tr>
<td><strong>Impact to Education:</strong></td>
<td>At school, work can be done in the privacy of office space (in contrast to the often social nature of computer labs). At home, the same files are locally available, and the computer serves the dual purpose of facilitating remote connectivity to on-campus computational resources. On research travel, students would be able to immediately integrate data into their personal files. On conference travel, the student would use their own laptop for presentations and remaining in electronic contact with COE resources.</td>
</tr>
</tbody>
</table>

## eCRT Restrictions:

<table>
<thead>
<tr>
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<th>Details</th>
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<tr>
<td><strong>TOTAL PROPOSED</strong></td>
<td>$30,000</td>
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<tr>
<td><strong>TOTAL AWARDED</strong></td>
<td>$0</td>
</tr>
</tbody>
</table>
Laptop Computers for Graduate Students: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Inappropriate: Fund Elsewhere
Funding Recommendation: $

Restrictions:

**Reviewer: Alan Kuutilla**
This should be funded by dept. for a pilot program.

**Reviewer: Steven Kovarik**
If this is a perk to bring students to the university should we be looking at a cost sharing. The department should be looked to for cost sharing. Is the computer owned by the department? If not then how do the students get software that is only allowed on department systems?

This will become a problem with respects to maint. as the students are the admin on the system but we will be requested to repair of fix issues.

**Reviewer: John Dickerson**
Laptops are purchased for grad students by their advisors if the need is considered important enough. This is clearly a research activity and not appropriate for EFTF.

**Reviewer: Chris McCoy**
The fee could not sustain such a system.
MANUFACTURING LAB IMPROVEMENT FY08

Proposer: Pal Molian
Department: ME
Status: Not Approved
Requested Funding: $25,000
Total Awarded: $0

Start Date: 7/1/2007
End Date: 12/31/2007

Project Description: Upgrade the computer control system for the tensile testing machine available in 1092 Black
Rationale: The tensile testing machine is extensively used in several laboratory sessions in manufacturing courses (both by ME and IMSE) that needs to be upgraded in its computer control. The existing unit is antique, slow and needs replacement by today's standards.

Proposed Solution: FCS control systems provide the state-of-the-art computer control system for the tensile tester that will allow the students to conduct experiments, collect and analyze data in the form acceptable for report presentations. Students complaints on the usage difficulties of the existing machine will be eliminated.

Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: This will have marked impact in ME 324 and IE 248 laboratory education where there are over 200 students per semester conduct experiments in tensile testing machine. This room is open to all students taking manufacturing courses in the ME and IMSE programs. The lab is open to all except when classes are in session.

eCRT Restrictions: Needed, but probably not appropriate for EFTF funds.

TOTAL PROPOSED $25,000

TOTAL AWARDED $0
Manufacturing Lab Improvement: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Inappropriate: Fund Elsewhere
Funding Recommendation: $

Restrictions:
- Needed, but probably not appropriate for EFTF funds.

*Reviewer: Don Schlagel*
  - Doesn't fit eftf guidelines.

*Reviewer: Chris McCoy*
  - This equipment is not consistent with intended purposes of EFTF funds.

*Reviewer: Chris McCoy*
  - This equipment should not be funded by EFTF.

*Reviewer: Steven Kovarik*
  - This is something that should be funded elsewhere. Look to Surcharge funding.

*Reviewer: Alan Kuutilla*
  - How does this effect students computing environment?
NDE LAB HARDWARE UPGRADE  

Proposer: Steven Kovarik  
Department: ECPE  
Status: Not Approved  
Requested Funding: $100,100  
Total Awarded: $0  

**Start Date:** 7/2/2007  
**End Date:** 10/31/2007  
**Project Description:** Proposal is to replace equipment to labs for the following classes EE/MSE 432/532 and EE/Physics 535 labs. These labs are taken by 100 students per year consolidated from EE, MSE, ME, AeroE, Physics, Chemistry.  
**Rationale:** Current equipment is 15 years old with computers that are currently out of warrantee.  
**Proposed Solution:** Update/replace equipment with current equipment needed to keep system operational.  
1. New parameter analyzer to replace 15 year old equipment = $40,000  
   Computer for the above = $1,500  
2. Varian Spectro-photometer to study optical properties (to replace 19 year old equipment which is now not being supported by the vendor-if it breaks, or there is a software glitch)  
   (This is also used in EE/Physics 535 and EE/Phys. 536 labs) = $52,000  
EE/Physics 535 labs (taught by EE)  
Course taken by students from EE, MSE, Physics, ChemE, ME  
1. High speed digital scope for measuring lifetime = $6,000  
2. High frequency Probe for above = $600  

**Seamless IT Compliance:** These facilities are restricted  
**Impact to Education:** Taken by ~100 students/year from EE, MSE, ME, AeroE, ChemE, Physics, Chemistry  
**eCRT Restrictions:** Probably needed, but not appropriate for EFTF funding.  

**TOTAL PROPOSED** $100,100  

**TOTAL AWARDED** $0
NDE Lab Hardware Upgrade: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Inappropriate: Fund Elsewhere
Funding Recommendation: $

Restrictions:

Probably needed, but not appropriate for EFTF funding.

*Reviewer: Don Schlagel*
This is not consistent with EFTF guidelines.

*Reviewer: Chris McCoy*
This is completely inappropriate for EFTF funds. It should not have been submitted.
OSCILLOSCOPES UPGRADES - ENABLING DIGITAL AND COMPUTERIZED DATA ACQUISITION AND ANALYSIS

Proposer: Sriram Sundararajan
Department: ME
Status: Not Approved
Requested Funding: $20,000
Total Awarded: $0

Start Date: 7/1/2006
End Date: 12/31/2006

Project Description:
The goal is to replace the current decade old analog oscilloscopes in the Mechanical Engineering Measurements and Instrumentation laboratory (Black 2081) with state-of-the-art digital scopes that allow interfacing with current computerized data acquisition software (LabVIEW). The upgrade will include SIX digital oscilloscopes (Tektronix) and a discounted accessory package that provides LabVIEW based control, recording and analysis of data (NI SignalExpress) plus one additional spare oscilloscope for lab design. This will be a ONE TIME upgrade that will covers all six experimental stations in the laboratory.

Rationale:
The Measurements laboratory is a critical component of the ME undergraduate curriculum, specifically the core course ME 370: Measurements and Instrumentation. This laboratory course contents are also directly applied in the other lab courses (Heat Transfer, Fluid and System Dynamics and Control). The laboratory provides hands-on content and is taken by 250 students every year.
Feedback from students and instructors indicates that outdated instruments are not fully representative of the current state of measurements systems used in research and industry. In a 2006 survey of students requesting input of uses of the tuition surcharge, 80% of 120 respondents indicated that lab upgrades are a priority.

Proposed Solution:
The most critical component of the measurement system is the oscilloscope which is used to measure and analyze signals of interest. This proposal aims to replace the existing analog scopes with state-of-the-art digital scopes that will enable full computerized data acquisition and analysis.
The old scopes (which are still functional) can be used as part of a department or college "lending center" for uses in education and research.

Seamless IT Compliance: These facilities are available to all engineering students
Impact to Education: New scopes will significantly enhance the core mechanical engineering curriculum (direct impact to core lab course ME 370 and secondary impact to core lab courses 335, 421, 436). This will impact EVERY mechanical engineering student (current undergraduate enrollment ~1000)
Enable design of measurements by enabling seamless computerized data acquisition and analysis in the course.
Enhance graduate research and education through the availability of measurement instruments (use of replaced scopes)

eCRT Restrictions: Very needed, but probably not appropriate for EFTF.

TOTAL PROPOSED $20,000

TOTAL AWARDED $0
Oscilloscopes upgrades - enabling digital and computerized data acquisition and analysis: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Inappropriate: Fund Elsewhere
Funding Recommendation: $

Restrictions:

Very needed, but probably not appropriate for EFTF.

**Reviewer: Steven Kovarik**
Important but not on EFTF. Look to Surcharge funding.

**Reviewer: Chris McCoy**
This is pushing the limits of EFTF appropriateness. Department should find funds for the oscilloscopes.

**Reviewer: Don Schlagel**
Not consistent with EFTF
### PRESENTATION LAPTOP

**Proposer:** Jim Wellman  
**Department:** AERE  
**Status:** Not Approved  
**Requested Funding:** $2,000  
**Total Awarded:** $0

<table>
<thead>
<tr>
<th><strong>Start Date:</strong></th>
<th>6/30/2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>End Date:</strong></td>
<td>8/1/2007</td>
</tr>
<tr>
<td><strong>Project Description:</strong></td>
<td>Provide a laptop to be used for presentations.</td>
</tr>
<tr>
<td><strong>Rationale:</strong></td>
<td>Many students require the use of a laptop to present material in classrooms that do not have a dedicated PC in the classroom</td>
</tr>
<tr>
<td><strong>Proposed Solution:</strong></td>
<td>Purchase a laptop</td>
</tr>
<tr>
<td><strong>Seamless IT Compliance:</strong></td>
<td>Restricted to students taking AerE courses</td>
</tr>
<tr>
<td><strong>Impact to Education:</strong></td>
<td>Provide students with the ability to present materials</td>
</tr>
<tr>
<td><strong>eCRT Restrictions:</strong></td>
<td>Equipment is needed, but it is more appropriate to fund in the South Zone Media Center and open that resource to ME, IMSE, MSE, AERE students.</td>
</tr>
</tbody>
</table>

**TOTAL PROPOSED**

$2,000

**TOTAL AWARDED**

$0
Presentation laptop: eCRT Review Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Inappropriate: Fund Elsewhere
Funding Recommendation: $

Restrictions:

   Equipment is needed, but it is more appropriate to fund in the South Zone Media Center and open that resource to ME, IMSE, MSE, AERE students.

**Reviewer: Steven Kovarik**
   This seems like a good thing and should be funded if the funds are available as long as the students are the only users. Students often need this functionality in many departments. What is the process or procedure for the checkout of this unit.

**Reviewer: Chris McCoy**
   How is this different from the lecturer laptop proposal? If this is for education, can't they be the same??

**Reviewer: Don Schlagel**
   Why not combine this and the lecturer laptop into one. Lecturers could check out the laptop, as could students....
ROBOTICS AND MEASUREMENT AS A BACKDROP FOR CE AND SE PROBLEM SOLVING

Proposer: Tom Daniels
Department: ECPE
Status: Not Approved
Requested Funding: $ 5,600
Total Awarded: $0

**Start Date:**  7/1/2007
**End Date:**  10/31/2007
**Project Description:**
Change and enhance the Computer and Software Engineering undergraduate student 186 and 186 course taken by all incoming students with innovative programming controllers and robotic devices.

**Rationale:**
Classes in CE and SE (185 and 186). These classes focus on programming in C as the tool to solve problems, but the students tend to see it as "just another programming class." It is believed that it can be much more than that and in the long term yield gains in recruitment and engagement that affect student performance down into their later years.

**Proposed Solution:**
The first platform proposes to buy is the iRobot Create robot with Atmel Atmega168 Microcontroller package and rechargeable battery. This is a very flexible and sturdy package that is believed will stand up to lab use much better than other robot platforms. Course course Professor and Technician plan to add a breadboard and various lab kits to add sensors, actuators, etc. to the robots.

The second platform proposed is a wireless MEMS accelerometer. These have recently come to the forefront with the Nintendo Wii gaming system. The system gives 3 axis acceleration readings at up to 200Hz sampling over Bluetooth.

Beyond the engagement and recruiting goals, these platforms will getting students ready for CPRE and work in embedded systems. Although the department will continue to teach C, in labs introduction to concepts of doing things with noisy measurements and basic statistics, designing processes using state machines and then writing equivalent code to control the robots, basic understanding of vectors and physics, simple numerical integration, exposure to basic hardware and a few circuits (a demand of CE students that we don't meet in the freshman classes).

**Resources Needed:** $5000-$6000
20 Robots kits (15 lab stations plus 5 spares) * $180
20 Accelerometer Kits * $100 ( $40 each if we can get Nintendo Wii Controllers and use those)

**Seamless IT Compliance:**
These facilities are restricted

**Impact to Education:**
The students that are taking Computer or Software Engineering courses are required to take these basic entry courses when entering ECpE. This addition will heavily impact how students look at programming and Computer and Software engineering.

**eCRT Restrictions:**
Concerns:
- This is a gray area for EFTF; it's external electronic equipment; outside the scope of EFTF?

**TOTAL PROPOSED** $  5,600

**TOTAL AWARDED** $0
Robotics and Measurement as a Backdrop for CE and SE Problem Solving: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Inappropriate: Fund Elsewhere
Funding Recommendation: $

Restrictions:

Concerns:

- This is a gray area for EFTF; it's external electronic equipment; outside the scope of EFTF?
STUDENT ADVISING--PROCESS IMPROVEMENT

Proposer: Gloria Starns
Department: ME
Status: Not Approved
Requested Funding: $ 3,000
Total Awarded: $0

Start Date: 7/2/2007
End Date: 7/1/2008

Project Description: Tablet PCs (2) would be used by Advisors and students to sign all documents that would otherwise be produced on paper. Stakeholders in the College of Engineering are aware of, and agreeable to, this process. If this pilot can be shown to be successful, this process could be extended across the University.

Rationale: Most hard copies received by advisors begins as digital information. To convert these paper copies back into digital format is unnecessary, expensive, and ultimately requires either storage or disposal of the original hard copy. If hard copies are not transferred back to digital means students are required to leave the Center with information that is for most part, confidential. Regardless there is expense due to loss of floor space and/or shredding.

Proposed Solution: This project results in a savings of time and expense. Furthermore, the process of handling, filing, storing, and eventually disposing of information that, for the most part, begins as digital information is unnecessary.

Seamless IT Compliance: All mechanical engineering students, potential for all students
Impact to Education: Students, academic advisors, and all personnel in the Engineering Undergraduate Program will be positively impacted due to increased efficiency in any process requiring paper copies, particularly those requiring a student signature. Students, College personnel, and advisors would have digital copies of their specific transactions immediately. The Mechanical Engineering Advising Center currently files approximately 52,000 sheets of paper--most of which began as digital information.

eCRT Restrictions: Probably very worthwhile, but not appropriate for EFTF.

TOTAL PROPOSED $ 3,000

TOTAL AWARDED $0
Student Advising--Process Improvement: eCRT Review

Panel Comments

**eCRT Panel Summary:**
Proposal Priority Recommendation: Inappropriate: Fund Elsewhere
Funding Recommendation: $

Restrictions:

Probably very worthwhile, but not appropriate for EFTF.

*Reviewer: Steven Kovarik*
This is administrative and should be funded elsewhere.

*Reviewer: Don Schlagel*
This does nothing to aid in the students learning engineering.

*Reviewer: Chris McCoy*
This should be departmentally funded -- it's an administrative process.
SURVEYING EQUIPMENT UPGRADE FY08

Proposer: Josh Klesel
Department: CCEE
Status: Not Approved
Requested Funding: $147,000
Total Awarded: $0

Start Date: 5/1/2007
End Date: 6/30/2007

Project Description: A survey of 120 CCEE students identified the need for more current surveying equipment as the number two need in the department. This proposal seeks to purchase from one or more vendors at least 10 total station units, 10 Global positioning location units and datcollectors and software to expand the educational experience with state of the art equipment. It allows the department to enhance it’s application of modern surveying methods.

Rationale: In a recent survey of upperclass students, a common request was for better surveying equipment. In fact, it appeared in over 17% of the responses (21 out of 120). The goal of this request is provide updated equipment with cutting edge capabilities, such as data collectors and GPS. The ConE program has recently acquired (on loan to be used as matching funds) some new equipment from Ziegler/CAT/Trimble.

Proposed Solution: 10 each Total Stations @ $5,700 each = $57,000
10 each Data Collectors @ $1,000 each = $10,000
4 each GPS/ Data Collectors @ $20,000 each = $80,000

Seamless IT Compliance: These facilities are restricted
Impact to Education: This expand the educational experience with state of the art equipment. It allows the department to enhance it’s application of modern surveying methods in the basic CE-111 surveying course, CE-417 Land Surveying course, CE-594 GPS Machine Control, and a proposed CE/ConE 400x course.

eCRT Restrictions:

TOTAL PROPOSED $147,000

TOTAL AWARDED $0
Surveying equipment upgrade: eCRT Review Panel Comments

*eCRT Panel Summary:*
Proposal Priority Recommendation: Inappropriate:Fund Elsewhere
Funding Recommendation: $

Restrictions:

**Reviewer: Steven Kovarik**
This is not computing and should be funded elsewhere, possibly Surcharge funds.

**Reviewer: Don Schlagel**
This is extremely expensive and frankly, at the borderline of justified EFTF use. I think it is a good idea, but the funding should not come from EFTF.

**Reviewer: Chris McCoy**
Probably not appropriate to fund from EFTF.
Guidelines for Appropriate Expenditure of Income from the Student Computer Fee

Approved by Computation Advisory Committee, CAC, on May 9, 1991
Amended on November 19, 1993, March 7, 1996 and December 1, 2005

These guidelines apply to the use of all student computer fee funds (Central Pool, College Pool, or any other funds supported by student computer fees). The expectation is that committees with half of their members consisting of Iowa State students establish priorities and make decisions about the expenditure of student computer fees. The Computation Advisory Committee, CAC, should be consulted for interpretation of these guidelines or the perceived need for revisions of these guidelines.

I. USE CATEGORIES

A. The types of uses deemed to be supportable are:
   1. Information technology resources for all Iowa State University students.
   2. Information technology resources by faculty and staff (provided that such use is directly related to instruction).

B. The types of uses deemed inappropriate for support are:
   1. Sponsored research and consulting by students, faculty or staff.
   2. Un-sponsored research or consulting by faculty or staff.
   3. Staff work not directly related to instruction.
   4. Construction and renovation of physical facilities, including furniture and wiring.
   5. Purchase of major information technology equipment (greater than $25K per system) without consultation with CAC.
   6. Personnel on appointments exceeding two years.

II. EXPENDITURE CATEGORIES (intended principally for the supportable uses listed in section IA)

A. HARDWARE – Purchase, maintenance, replacements or upgrades of university-owned equipment
B. SOFTWARE – Purchase, maintenance, replacements or upgrades for university-owned machines and/or site licenses
C. EXPENDABLE SUPPLIES (e.g., paper, toner, media, etc.)
D. STUDENT ACCESS TO NETWORKS
E. SECURITY AND PROTECTION against loss through theft of computers and computer peripherals (e.g. tie downs, special door locks, video surveillance systems, and payment of insurance premiums)
F. SUPPORT PERSONNEL directly involved with hardware/software assistance and maintenance (e.g. lab monitors)
G. PERSONNEL INVOLVED IN COURSE DEVELOPMENT as deemed appropriate by the colleges and departments for courses that make use of information technology resources. These expenditures may be for all Iowa State University student support, Information Technology Services personnel support, and general support costs (which may include expenditures to foster and promote course development).
H. OTHER SERVICES or FEES related to the use of information technology for class development or delivery.
## COLLEGE SOFTWARE PORTFOLIO -- LICENSE SUMMARY

<table>
<thead>
<tr>
<th>APPLICATIONS</th>
<th>QTY</th>
<th>TYPE</th>
<th>PLATFORMS</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abaqus</td>
<td></td>
<td>Various</td>
<td>Floating</td>
<td>Win / Linux</td>
</tr>
<tr>
<td>Ansys</td>
<td>45</td>
<td>Floating</td>
<td>Win / Linux / Sol</td>
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<tr>
<td>AutoDesk</td>
<td>1000</td>
<td>Node</td>
<td>Win</td>
<td>Covers all systems in the college</td>
</tr>
<tr>
<td>CrossOverOffice</td>
<td>100</td>
<td>Floating</td>
<td>Linux</td>
<td></td>
</tr>
<tr>
<td>UGS Suite</td>
<td>280</td>
<td>Floating</td>
<td>Win / Linux</td>
<td>Licenses depend upon specific product; suite includes dozens of different packages</td>
</tr>
<tr>
<td>FEMLab</td>
<td>30</td>
<td>Floating</td>
<td>Linux</td>
<td></td>
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<td>Fluent</td>
<td>56</td>
<td>Floating</td>
<td>Win / Linux / Sol</td>
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<td>Intel C++</td>
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<td>Floating</td>
<td>Win / Linux</td>
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<td>Intel FORTRAN</td>
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<td>Floating</td>
<td>Win / Linux</td>
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<td>MasterCAM</td>
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<td>Win</td>
<td></td>
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<td>MathCad</td>
<td>150</td>
<td>Floating</td>
<td>Win</td>
<td></td>
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<tr>
<td>MathType</td>
<td></td>
<td>Unlimited</td>
<td>Floating</td>
<td>Win</td>
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<td>Matlab</td>
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<td>Various</td>
<td>Floating</td>
<td>Win / Linux / Sol</td>
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<td>MSDNAA</td>
<td></td>
<td>Unlimited</td>
<td>Node</td>
<td>Win</td>
</tr>
<tr>
<td>National Instruments Acad. Bundle (LabView)</td>
<td>Unlimited</td>
<td>Floating</td>
<td>Win / Linux</td>
<td></td>
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<tr>
<td>Pro/Engineer + Pro/Mechanica</td>
<td>500</td>
<td>Floating</td>
<td>Win / Linux</td>
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<td>RedHat Enterprise Linix</td>
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<td>Unlimited</td>
<td>N/A</td>
<td>Linux</td>
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<td>Scientific Word</td>
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<td>Unlimited</td>
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<td>SolidWorks</td>
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<td>Tecplot</td>
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<td>WinEDT</td>
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<td>Unlimited</td>
<td>N/A</td>
<td>Win</td>
</tr>
<tr>
<td>X-Win32</td>
<td></td>
<td>Unlimited</td>
<td>Floating</td>
<td>Win</td>
</tr>
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</table>
Appendix III

Example Standard Configurations

- Dell Latitude D620 Penium Duo Laptop
- Dell Optiplex 745
Print Summary

Latitude D620 Pentium Duo Laptop

From $1,795.00
Now from $1,095.06

Preliminary Ship Date: 3/22/2007

Date 3/16/2007 9:59:11 AM Central Standard Time
Catalog Number 25 Retail rc959554

Latitude D620

- Intel® Core™ 2 Duo T5500 (1.66GHz) 2M L2 Cache, 667Mhz Dual Core [Included in Price]
- Intel® Core™ 2 Duo T5600 (1.83GHz) 2M L2 Cache, 667Mhz Dual Core [add $137.90]
- Intel® Core™ 2 Duo T7200 (2.00GHz) 4M L2 Cache, 667Mhz Dual Core [add $243.36]
- Intel® Core™ 2 Duo T7400 (2.16GHz) 4M L2 Cache, 667Mhz Dual Core [add $416.40]

LCDs

- 14.1 inch Wide Screen WXGA LCD Panel [Included in Price]
- 14.1 inch Wide Screen WXGA+ LCD Panel [add $23.40]

Memory

- 1.0GB, DDR2-667 SDRAM, 1 DIMM [Included in Price]
- 1.0GB, DDR2-533 SDRAM, 2 DIMMS [subtract $8.00]
- 2.0GB, DDR2-667 SDRAM, 2 DIMMS [add $124.60]

Internal Keyboard

- Internal English Keyboard [Included in Price]

External Monitors

- None
- Dell 17 inch UltraSharp™ 1707FP Flat Panel, Adjustable Stand, VGA/DVI [add $220.00]
- Dell 19 inch UltraSharp™ 1907FP Flat Panel, adjustable stand, VGA/DVI [add $266.00]

Graphics

- Intel® Integrated Graphics Media Accelerator 950 [subtract $46.80]
- 256MB NVIDIA® Quadro NVS 110M TurboCache™ [Included in Price]

Dell Printer Drivers

- None
- Dell 1110 Printer Driver add $0.00
- Dell 1710 Printer Driver add $0.00
<table>
<thead>
<tr>
<th>Feature</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell 924 Printer Driver</td>
<td>add $0.00</td>
</tr>
<tr>
<td>Dell 944 Printer Driver</td>
<td>add $0.00</td>
</tr>
<tr>
<td>Dell 964 Printer Driver</td>
<td>add $0.00</td>
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### Hard Drives

<table>
<thead>
<tr>
<th>Drive Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>100GB Hard Drive, 9.5MM, 7200RPM</td>
<td>[add $62.40]</td>
</tr>
<tr>
<td>40GB Hard Drive, 9.5MM, 5400RPM</td>
<td>[subtract $46.02]</td>
</tr>
<tr>
<td>60GB Hard Drive, 9.5MM, 5400RPM</td>
<td>[subtract $23.40]</td>
</tr>
<tr>
<td>60GB Hard Drive, 9.5MM, 7200RPM</td>
<td>[Included in Price]</td>
</tr>
<tr>
<td>80GB Hard Drive, 9.5MM, 5400RPM</td>
<td>[subtract $15.60]</td>
</tr>
<tr>
<td>80GB Hard Drive, 9.5MM, 7200RPM</td>
<td>[add $15.60]</td>
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### Touchpad Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touchpad with UPEK® Fingerprint Reader</td>
<td>[add $38.22]</td>
</tr>
<tr>
<td>Standard Touchpad</td>
<td>[Included in Price]</td>
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### Floppy Drive

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<thead>
<tr>
<th>Drive Type</th>
<th>Price</th>
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<tbody>
<tr>
<td>Floppy Drive</td>
<td>[add $38.22]</td>
</tr>
<tr>
<td>No Floppy Drive</td>
<td>[Included in Price]</td>
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### Operating Systems

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genuine Windows Vista™ Business, with media</td>
<td>[add $6.00]</td>
</tr>
<tr>
<td>Genuine Windows Vista™ Ultimate, with media</td>
<td>[add $56.00]</td>
</tr>
<tr>
<td>Genuine Windows® XP Professional, SP2, with media</td>
<td>[Included in Price]</td>
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### AC Adapter

<table>
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<th>Adapter Type</th>
<th>Price</th>
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<tbody>
<tr>
<td>90W A/C Adapter</td>
<td>[Included in Price]</td>
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### Module Bay Devices

<table>
<thead>
<tr>
<th>Device Type</th>
<th>Price</th>
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<tbody>
<tr>
<td>24X CD-RW/DVD w/ Cyberlink PowerDVD™ [subtract $39.00]</td>
<td></td>
</tr>
<tr>
<td>24X CD-RW/DVD w/ Cyberlink PowerDVD™ for Vista Basic, Business</td>
<td>[subtract $39.00]</td>
</tr>
<tr>
<td>24X CD-RW/DVD for Vista Ultimate</td>
<td>[subtract $39.00]</td>
</tr>
<tr>
<td>8X DVD+/-RW w/Roxio and Cyberlink Power DVD™ for Vista Basic, Business</td>
<td>[Included in Price]</td>
</tr>
<tr>
<td>8X DVD+/-RW w/Roxio Creator Dell Edition Digital Media for Vista Ultimate, add $0.00</td>
<td></td>
</tr>
<tr>
<td>8X DVD+/-RW w/Roxio Digital Media™ and Cyberlink Power DVD™, add $0.00</td>
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### Speakers

<table>
<thead>
<tr>
<th>Speaker Type</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Dell A225 Two Piece Stereo System</td>
<td>[add $14.82]</td>
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### Wireless LAN (802.11)

<table>
<thead>
<tr>
<th>Device Type</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>Intel® 3945 802.11a/g Dual-Band Mini Card</td>
<td>[Included in Price]</td>
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</table>

### Reference Guide

<table>
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<tr>
<th>Guide Type</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>Quick Reference Guide</td>
<td>[Included in Price]</td>
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### Mouse Pad

<table>
<thead>
<tr>
<th>Mouse Pad Type</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Mouse Pad [add $2.34]</td>
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</tr>
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### Removable Storage

<table>
<thead>
<tr>
<th>Storage Device</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>128MB USB 2.0 Flash Storage Device</td>
<td>[14.82]</td>
</tr>
<tr>
<td>256MB USB 2.0 Flash Storage Device [$46.02]</td>
<td></td>
</tr>
<tr>
<td>512MB USB 2.0 Flash Storage Device [$38.22]</td>
<td></td>
</tr>
</tbody>
</table>

**Batteries**

- 6 Cell Primary Battery [Included in Price]
- 9 Cell Primary Battery [add $14.82]

**File System**

- NTFS File System for all Operating Systems [Included in Price]

**Additional System Options**

- Aggregate Special P99646030 Exp 05/26

**Systems Management**

- None
  - Resource DVD - Contains Diagnostics and Drivers for Vista add $0.00

**Resource CD**

- Resource CD - Contains Diagnostics and Drivers [Included in Price]
- Resource DVD - Contains Diagnostics and Drivers for Vista add $0.00

**Hardware Support Services**

- 3 Year Limited Warranty plus 3 Year NBD On-site Service and CompleteCare [Included in Price]
- 4 Year Limited Warranty plus 4 Year NBD On-site Service and CompleteCare [add $168.57]
- 4 Year Limited Warranty plus 4 Year NBD On-Site Service add $0.00

**Gold Technical Support**

- None
  - Gold Technical Support, Latitude, 3 Years [add $69.00]
  - Gold Technical Support, Latitude 4Yrs [add $87.00]
  - Gold Technical Support, Latitude, 5Years [add $106.00]

**Installation Services**

- None
  - No Onsite System Setup [Included in Price]

**Keep Your Hard Drive**

- None
  - Keep Your Hard Drive, 3 Years [add $20.00]
  - Keep Your Hard Drive, 4 Years [add $25.00]
  - Keep Your Hard Drive, 5 Years [add $30.00]

**Services - Absolute Asset Tracking/Security**

- None
  - ComputracePlus- 3 Year [add $97.00]
  - ComputracePlus- 4 Year [add $119.00]

**Carrying Cases - Shipped Separately**

- Kensington Contour Roller - Black [$79.99]

**Carrying Cases**

- None [subtract $22.62]
<table>
<thead>
<tr>
<th>Category</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Protection</strong></td>
<td>Belkin 2-outlet Notebook Surge Protector [$13.00]</td>
</tr>
<tr>
<td></td>
<td>Belkin NB surge &amp; 4-port USB 2.0 Hub bundle [$32.99]</td>
</tr>
<tr>
<td><strong>Graphics &amp; Design</strong></td>
<td>Nuance - PDF Converter Professional 4 [$99.00]</td>
</tr>
<tr>
<td><strong>Services- Locks/Accessories packed in System Box</strong></td>
<td>Kensington Universal Key Lock- Black Cable (Man. Pt. 64068E) [$44.55]</td>
</tr>
<tr>
<td><strong>Additional Batteries</strong></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>6 Cell Media Bay Battery [add $92.82]</td>
</tr>
<tr>
<td></td>
<td>Additional 6 Cell Primary Battery [add $53.82]</td>
</tr>
<tr>
<td></td>
<td>Additional 9 Cell Primary Battery [add $77.22]</td>
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<tr>
<td><strong>Docking Solutions</strong></td>
<td>D/Dock, Expansion Station [$217.62]</td>
</tr>
<tr>
<td></td>
<td>D-Family Monitor Stand [$38.22]</td>
</tr>
<tr>
<td></td>
<td>D/Port Advanced Port Replicator [$124.02]</td>
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<tr>
<td></td>
<td>D/View Notebook Stand [$53.82]</td>
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<tr>
<td><strong>Additional Power Cords / AC Adapters</strong></td>
<td>Dell Additional Combination Power Adapter includes Auto/Air and AC [$53.82]</td>
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<tr>
<td><strong>Bluetooth</strong></td>
<td>None [subtract $22.62]</td>
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<tr>
<td></td>
<td>Dell Wireless® 350 Bluetooth Module [Included in Price]</td>
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<tr>
<td></td>
<td>Dell Wireless® 350 Bluetooth Module for Vista add $0.00</td>
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<tr>
<td><strong>Mobile Broadband</strong></td>
<td>None</td>
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<tr>
<td></td>
<td>Dell Wireless 5500 Built-in HSDPA Mini-Card for Cingular service [add $175.50]</td>
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<tr>
<td></td>
<td>Dell Wireless 5700 Built-in EVDO Mini-Card for Verizon Wireless service [add $139.62]</td>
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<tr>
<td><strong>Notebook Accessories</strong></td>
<td>Kensington PocketMouse Pro USB Wireless Laser Mouse [$39.99]</td>
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<tr>
<td><strong>Networking Cables</strong></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Belkin CAT5e Snagless Molded Blue Network Cable - 7 ft [add $10.99]</td>
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</table>
sn CFG2
## Print Summary

### New Optiplex 745

**From $2,383.00**

**Now from $1,706.69**

*Preliminary Ship Date: 3/23/2007*

---

**My Selections**

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<tr>
<th>Date</th>
<th>3/16/2007 9:17:35 AM Central Standard Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number</td>
<td>25 Retail rc959554</td>
</tr>
</tbody>
</table>

**OptiPlex 745 Minitower**

- Intel® Core™ 2 Duo Processor E6300 (1.86GHz, 2M, 1066MHz FSB) [Included in Price]
- Intel® Core™ 2 Duo Processor E6400 (2.13GHz, 2M, 1066MHz FSB) [add $56.16]
- Intel® Core™ 2 Duo Processor E6600 (2.40GHz, 4M, 1066MHz FSB) [add $187.20]
- Intel® Core™ 2 Duo Processor E6700 (2.66GHz, 4M, 1066MHz FSB) [add $468.00]
- Intel® Pentium® D Processor 945 (3.40GHz, 2X2M, 800MHz FSB) [subtract $73.94]

**Operating System(s)**

- Genuine Windows® XP Professional, SP2, x32, without Media, English [Included in Price]
- Genuine Windows® XP Professional x64, with Media [add $23.10]
- Genuine Windows® XP Professional x64, without Media [add $23.10]

**File System**

- None
- NTFS File System for all Operating Systems [Included in Price]

**Memory**

- 1.0GB DDR2 Non-ECC SDRAM, 667MHz, (2DIMM) [subtract $327.52]
- 2.0GB DDR2 Non-ECC SDRAM, 667MHz, (2DIMM) [subtract $194.92]
- 4.0GB DDR2 Non-ECC SDRAM, 667MHz, (4DIMM) [Included in Price]

**Video Card**

- 128MB ATI Radeon X1300 (1 DVI/1 TV-out), full height [subtract $27.22]
- 256MB ATI Radeon X1300PRO, Dual Monitor DVI or VGA (TV-out), FH [Included in Price]
- DVI (Digital) Adapter Card [subtract $91.22]
- Integrated Video, Intel® GMA3000 [subtract $116.22]

---

**Serial Port Adapter**

---

**Print this page**  **Close**

---

### Controller Option

- None
- PS2 Serial port adapter, full height [add $7.02]

### Monitors

<table>
<thead>
<tr>
<th>Option Description</th>
<th>Price</th>
</tr>
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<tbody>
<tr>
<td>Dell 17 inch UltraSharp™ 1707FP Flat Panel, Adjustable Stand, VGA/DVI</td>
<td>subtract $46.80</td>
</tr>
<tr>
<td>Dell 19 inch UltraSharp™ 1907FP Flat Panel, Adjustable Stand, VGA/DVI</td>
<td>included in price</td>
</tr>
<tr>
<td>Dell 20 inch UltraSharp™ 2007FP Flat Panel, Adjustable Stand, VGA/DVI</td>
<td>add $156.00</td>
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<tr>
<td>Dell 20 inch UltraSharp™ 2007FPW Widescreen, Adjustable Stand, VGA/DVI</td>
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<td>Dell 24 inch UltraSharp™ 2407FPW Widescreen, Adjustable Stand, VGA/DVI</td>
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<td>No Monitor</td>
<td>subtract $146.80</td>
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### Second Monitors

- None [subtract $266.00]
- Dell 17 inch UltraSharp™ 1707FP Flat Panel, Adjustable Stand, VGA/DVI [subtract $56.00]
- Dell 19 inch UltraSharp™ 1907FP Flat Panel, Adjustable Stand, VGA/DVI [included in price]
- Dell 20 inch UltraSharp™ 2007FP Flat Panel, Adjustable Stand, VGA/DVI [add $159.00]
- Dell 20 inch UltraSharp™ 2007FPW Widescreen, Adjustable Stand, VGA/DVI [add $159.00]
- Dell 24 inch UltraSharp™ 2407FPW Widescreen, Adjustable Stand, VGA/DVI [add $529.00]

### Keyboard

- Dell USB Enhanced Multimedia Keyboard, English, Black [included in price]

### Mouse

- Dell USB 5-Button Premium Optical Mouse, Black [included in price]
- Dell USB 5-Button Premium Optical Mouse for Vista [add $0.00]

### Mouse Pad

- None
- Mouse Pad [add $2.34]

### Boot Hard Drives

- 160GB SATA 3.0Gb/s and 8MB DataBurst Cache™ [included in price]
- 250GB SATA 3.0Gb/s and 8MB DataBurst Cache™ [add $27.30]
- 80GB SATA 3.0Gb/s and 8MB DataBurst Cache™ [subtract $19.50]

### Floppy Drive and Media Card Reader Options

- 1.44MB 3.5 Inch Floppy Drive [subtract $11.98]
- Dell 13 in 1 USB Media Card Reader [included in price]
- No Floppy Drive [subtract $19.00]

### Lead Free Motherboard

- RoHS Compliant Lead Free Chassis and Motherboard [included in price]

### Dell Energy Smart

- None
- Dell Energy Smart Enable [included in price]

### Speakers
Dell™ A225 Speakers, Black [add $6.63]
Dell A525 30 Watt 2.1 three piece Stereo Speakers with Subwoofer (Black) [add $37.83]
Dell AS501 Sound Bar for all UltraSharp Flat Panel Displays (Black) [add $14.43]
Internal Dell Business Audio Speaker [Included in Price]

Modem

- None
- Dell V.92 PCI Data/Fax Controllerless Modem, full height [add $22.62]

Additional PCI-e Network Adapter Card

- None
- Broadcom NetXtreme 10/100/1000 PCIe Gigabit Networking Card, Full Height [add $29.00]

Removable Media Storage Devices

- 48X32 CDRW/DVD Combo with Cyberlink Power DVD™ [subtract $16.11]
- 48X32 CDRW/DVD Combo w/CyberlinkPowerDVD™ for VistaHomeBasic/Business [subtract $16.11]
- 48X32 CDRW/DVD Combo with Cyberlink Power DVD™ for Vista Ultimate [subtract $16.11]
- 16X DVD+/-RW SATA, Roxio Creator™ Dell Edition [Included in Price]
- 16X DVD+/-RW SATA,RoxioCreator™DellEdition for VistaHomeBasic/Business add $0.00
- 16X DVD+/-RW and 16X DVD, SATA, Roxio Creator™ Dell Edition [add $26.01]
- 16XDVD+/-RWand16XDVD,RoxioCreator™DellEdition for VistaHomeBasic/Business [add $26.01]
- 16XDVD+/-RW and 16XDVD, Roxio Creator™ Dell Edition for Vista Ultimate [add $26.01]
- 16X DVD+/-RW SATA,RoxioCreator™DellEdition for Vista Ultimate add $0.00

Resource CD

- Resources CD contains Diagnostics and Driver for Dell OptiPlex Systems [Included in Price]
- Resource CD - contains Diagnostics and Drivers for 64BIT systems add $0.00
- Resource DVD contains Diagnostics and Driver for Dell OptiPlex Systems add $0.00

Cables for Your Promotional Printer

- Dell Black 10 Ft. USB Printer Cable [$24.95]

Additional System Options

- Aggregate Special Pricing P99646030

Hardware Support Services

- 3 Year Non Critical Care [add $1.17]
- 3 Year Limited Warranty plus 3 Year NBD On-Site Service [Included in Price]
- 4 Year Limited Warranty plus 4 Year NBD On-Site Service [add $82.77]
- 5 Year Limited Warranty plus 5 Year NBD On-Site Service [add $119.97]

Complete Care

- None
- Add CompleteCare Accidental Damage Svc, to 3Yr Lim Warranty [add $59.00]
- Add CompleteCare Accidental Damage Svc, to 4Yr Lim Warranty [add $79.00]

Gold Technical Support

- None
- Gold Technical Support, Optiplex, 3 Years [add $69.00]
- Gold Technical Support, Optiplex, 4Years with Letter [add $87.00]
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<td>Installation Support Services</td>
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<td>Asset Tracking/Security (CFI)</td>
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<td>ComputracePlus- 3 Year [add $97.00]</td>
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<td></td>
<td>ComputracePlus- 4 Year [add $119.00]</td>
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<td>Locks/Accessories w/Computer System (CFI)</td>
<td>Key Lock With Tie Down Cable [$44.55]</td>
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<tr>
<td>Additional Hard Drives</td>
<td>None</td>
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<tr>
<td></td>
<td>160GB SATA 3.0Gb/s and 8MB DataBurst Cache™ [add $63.96]</td>
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<td>250GB SATA 3.0Gb/s and 8MB DataBurst Cache™ [add $79.56]</td>
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<td>80GB SATA 3.0Gb/s and 8MB DataBurst Cache™ [add $53.82]</td>
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</table>

1 The Preliminary Ship Date represents the estimated time it takes to process your order and custom build your computer based on approved credit card purchase. The Preliminary Ship Date is not intended to provide you with an actual estimated ship date. Your estimated ship date may vary based upon the payment method you choose and other factors. You will receive your Estimated Ship Date in your e-mail confirmation. Customers using E-Check as their method of payment should add 3 days to their Preliminary Ship Date.

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Feedback

sn CFG6
Appendix IV

eCRT Operating Panel Meeting Minutes

- 3/13/2007


**ECRT OPERATIONAL PANEL**

2220P Hoover Hall  
Thursday, March 8, 2007

**Attendees:**  
Chris McCoy, John Dickerson, Alan Kuuttila, Josh Klesel, Steven Kovarik, Don Schlagel, Jim Wellman, Hap Steed, Mike Renze, Jamie Alt

**DISCUSSIONS**

**Professional Development**  
Issue: Is it appropriate for professional development to be part of the student fee budget

- Departments should fund some of the professional development cost for staff
- General IT professional development, a conference for example, should not be billed to students
- Training that has a specific benefit to students should be an allowable expense
- Allowable under CAC and appropriate for staff to have a certain amount of training & development, within a reasonable level – Departments should contribute (cost share). Last year $1750/staff member was set as a guideline.

Motion: Budget no more than $1750 per full time IT staff for professional development (faculty and students not included)  
Motion approved by majority.

**Admin Computers**  
Issue: Where should this expense be located, is this an operating expense item, and which staff (FT/student)

- Departments should cost share FT staff and student staff machines
- Test builds – use old machines

Motion: It is appropriate to include cost for a reasonable system on a reasonable cycle for FT IT staff only  
Motion approved by majority.

**Cameras/Security**  
Issue: Cost is increasing and there seems to be no collaboration between departments for a college wide solution

- Consolidate into a college wide solution (capital project)
- Software and camera model need to be collaborated between departments
- Purpose: a deterrent and used to track missing equipment

Motion: Consolidate all camera proposals into a single capital project to coordinate a college wide solution of software and equipment.  
Motion approved by majority

**Student Employment**  
Issues/Motions: as noted below

**TA’s:**  
Issue: Is it appropriate.

- A teaching assistant works under the direction of a faculty member supporting academics
- The funding type can be a TA category and still be a System Administrator title if the student supports a full-time IT staff member

Motion: Not appropriate for EFTF  
Motion approved by majority
**Technicians**

Issue: Is it appropriate to be covered with EFTF funds (is it computer related).

- A technician provides non-IT support (not direct to a computer)
- ECpE – equipment is non-functional without the technician’s support
- CAC guidelines note appropriate expenditure as: expenditures to support personal directly involved with software assistance and computer hardware maintenance.

Motion: Not appropriate, outside of hardware maintenance according to our definition of hardware as computer hardware.
Motion approved by majority

**Help Desk**

Issue: Is it appropriate for help desk students to be covered, what are the boundary conditions

- Deals with specific application knowledge
- Appropriate as noted in CAC guidelines
- Include a documentation trail so we can determine how frequently it is being used.

Motion: In general it is appropriate under CAC guideline. Proposals need to be evaluated on a case-by-case basis.
Motion approved by majority

**System Administrators**

Issue: Is it appropriate; how does one account for the number of students; what is the responsibility; how do we coordinate students to make better use of their time.

- Tabled for discussion during our next meeting

**NEXT STEPS**

- Next meeting: Tuesday, March 13, 2007 from 8AM – 10AM (2220P Hoover).
ECRT OPERATIONAL PANEL
3.13.07

2220 P Hoover Hall
Tuesday, March 13, 2007

Attendees:
Chris McCoy, John Dickerson, Alan Kuuttila, Josh Klese, Steven Kovarik, Don Schlagel, Jim Wellman, Hap Steed, Mike Renze, Jamie Alt

Discussions

Student Employment
Issue/Motion: as noted below

System Administrators
Issue: Is it appropriate; how does one account for the number of students; what is the responsibility; how do we coordinate students to make better use of their time.

- AerE – Relies heavily on student support because there is only one full-time staff (system support specialist)
- It will not be possible to establish a general rule. Reviewing on a case-by-case basis will be the best method and any change in student staffing requests should be reviewed to determine what the increase in need is.
- Coordinating of students – Will this be beneficial, is now the appropriate time and is there a good way to do this?
- A goal to reach but for day-to-day tasks it doesn’t seem to work with the current structure.

Motion: Review proposals on a case-by-case basis. Look to coordinate some tasks/responsibilities in the future. Review any change in need to determine why there is a shift in need.

ECRT Proposal Recommendations

ABE
ECRT Panel Recommendation – Critical: Fund Now (reduce by $8,000). Recommended funding $17,620

ECRT Panel Restrictions

- System Support Specialist line to be removed ($8,000); already covered in College Salary commitment
- Grad Assistant line should be named “Jr. Systems Administrator” (for definition purposes)
- Staffing professional development line should be moved to the “staffing” section

AERE
ECRT Panel Recommendation – Critical: Fund Now (reduce by $1,850). Recommended funding $66,690

ECRT Panel Restrictions

- Camera expenses need to be moved to the college wide Capital Project ($1600)
- Reduce training expense to $1750 (reduction of $250)
- TA Helpdesk: Table helpdesk for further study and combination with Matlab and other applications (CAD)
- Math correction needed

Discussions:

- TA to staff helpdesk:
  - A log to see their activities to determine use would be beneficial
  - It would be very hard to find a student who is knowledgeable in all the software students’ use
  - Assistance could be advertised college wide based on their knowledge
  - Use TA helpdesk line to develop a philosophy on how to do application help desk support in a systematic way college wide
eCRT Panel Recommendations

**CBE**

eCRT Panel Recommendation – Critical: Fund Now. Recommended funding $5,400

eCRT Panel Restrictions

- Fund as is

**CCEE**

eCRT Panel Recommendation – Critical: Fund Now. Recommended funding $8,520

eCRT Panel Restrictions

- Fund as is

**ECPE**

eCRT Panel Recommendation – Critical: Fund Now (reduce by $26,980) Recommended funding $78,780.

eCRT Panel Restrictions

- Security cameras need to be removed and added to the college Capital Project for cameras ($2,500)
- 2 Senior Systems Administrator computer upgrades – change amount to a reasonable amount, per previous meeting discussion ($1500/per; reduction of proposal - $1,600)
- Student Technicians – duties/responsibilities indicate they do not do computing support ($22,880)

Discussion:

- Printer Cost:
  - Should we look at printers as replaced on cycle when they fail? Printer replacement requests, maintenance costs with printer maintenance kits done each year on all printers?
  - Tabled for Capital Projects discussion

**ECSS**

eCRT Panel Recommendation – Critical: Fund Now (reduce by $5,600) Recommended funding $69,960

eCRT Panel Restrictions

- Adjust Jr. Unix System position to 15 hours/wk. (reduction of $2,100)
- Adjust Jr. Student System Admins to 15 hours/wk. (reduction of $3,500)

Discussion:

- Jr. Windows System Admins: students support the college and two departments (CCEE/MSE) and additional student support is needed.
- Hours may need modified to more accurately reflect hours worked.

**IMSE**

eCRT Panel Recommendation – Critical: Fund Now (reduce by $3,800) Recommended funding $48,535

eCRT Panel Restrictions

- Move software items to software portfolio ($3,800)
- Graduate TAs – EFTF committee should be addressing appropriateness of TA’s; eCRT is unclear if this is appropriate
  - The number requested is one more than last year.

**ME**

eCRT Panel Recommendation – Critical Fund Now (reduce by $14,500) Recommended funding $52,770

eCRT Panel Restrictions

- Camera costs should be removed and placed in the college Capital Project ($3,600)
Appendix

- Eliminate Student Technician, not appropriate for EFTF funds ($5,100)
- Reduce staff workstation replacement to $1500 ($800 reduction)
- Eliminate SAE outreach ($5,000)

Discussion

- SAE cost is for outreach activities

**MSE**
eCRT Panel Recommendation – Critical Fund Now. Recommended funding $6,600

eCRT Panel Restrictions

- Fund as is

**Toying with Technology**
eCRT Panel Recommendation – Inappropriate: Fund Elsewhere. Recommended funding $0

**NEXT STEPS**

- Next meeting: Wednesday, March 14, 2007 from 9AM – 11AM (114 Marston).
Appendix V

eCRT Software Panel Meeting Minutes

- 3/13/2007
- 3/14/2007
ECRT SOFTWARE PANEL 3.13.07

2220P Hoover Hall
Tuesday, March 13, 2007

Attendees:
Chris McCoy, John Dickerson, Alan Kuuttila, Josh Klesel, Steven Kovarik, Don Schlagel, Jim Wellman, Hap Steed, Mike Renze, Jamie Alt

ECRT PROPOSAL RECOMMENDATIONS

**ABE**
1. ABE & ME Joint MatLAB Toolbox SymHydraulics – Critical: Fund Now ($3,250)
2. Logix-Pro PLC Simulation Software – Critical: Fund Now ($510)
3. Matlab DAC Toolbox – Critical: Fund Now ($3,000)
4. Moldflow Plastics Advisor – Critical: Fund Now ($2,500)

**AERE**
1. Adobe Acrobat Pro - Critical: Fund Now ($1,000)
   - Allows editing of pdf
2. Adobe Photoshop - Critical: Fund Now ($50)
   - On one system which is attached to a color scanner
3. Altair - Critical: Fund Now ($1,500)
4. CATIA – Important: Fund as Appropriate ($5,000)
   - Working towards including as a core piece of software
5. Diskeeper – Opportune: Fund as Available ($600)
   - Maintenance product
6. Flight Simulator – Opportune: Fund as Available ($2,800)
   - New software. Purchase with the condition that a review is done at the end of the year to justify the need and determine how this software enhance course work.
7. HEAT - tabled discussion
   - Recommendation to reserve funds until eCRT determines which trouble ticketing system the college will use.
   - Cost should be shared by the college.
8. Maple - Critical: Fund Now ($3,000)
   - Software should be included in the base build and paid for at the college level.
   - Move proposal to College level
9. Netcam Watcher Pro – Software expense should be included in the camera Capital Project

**CBE**
1. Chemkin - Critical: Fund Now ($1,600)
2. HySYS - Critical: Fund Now ($2,500)

NEXT STEPS

- Next meeting: Wednesday, March 14, 2007 from 9AM – 11AM (114 Marston).
ECRT SOFTWARE PANEL

114 Marston
Wednesday, March 14, 2007

Attendees:
Chris McCoy, John Dickerson, Alan Kuuttila, Josh Klesel, Steven Kovarik, Don Schlagel, Jim Wellman, Hap Steed, Mike Renze, Jamie Alt

DISCUSSION

Software that can be installed on student owned systems should be so noted so that departments know they can have access to the software as well.

Discretionary Operating Expense Software

- Should we create a budgeted line for special purpose software? This will allow staff to purchase software without requesting approval from the roundtable if the cost is reasonable.
- Accountability may be difficult, our first priority is to students (student fee dollars)
- Recommendation: Include in each department proposal a line to cover mid-semester course and developmental needs; target estimate of $1500
  1. Software should be for courses (to meet an unexpected need) or a verifiable developmental need of the IT staff member (in support of the students/courses)
  2. Software should be an appropriate/reasonable cost

HEAT

A possible trouble ticket solution to coordinate help-desks?
Currently it does not seem to be beneficial to reserve funds to implement HEAT within the upcoming fiscal year. eCRT to continue investigation into what is the best solution for trouble ticketing for the CoE.
The Help Desk Model needs to be worked on with a better solution implemented for the college.

Opportune – Fund As Available; pending completion of the review period of HEAT

Adobe

$36,000 to put in all the labs; not viable to do college wide

ECRT PROPOSAL RECOMMENDATIONS

CCOE

1. Autoturn 5.x - Critical: Fund Now ($500)
2. Keyserver – Opportune: Fund as Available ($9,450)
   - Change proposal to Collegel level
   - Useful for audit trail, utilization reports and could eventually allow for software savings if we can review what software packages are being heavily used or not used at all
   - Enough clients requested to cover all the machines in CoE
   - Macrovision has a similar product but does only FlexLM products; functional on Windows and Linux (needed if we would want full coverage)
   - $2250 is the recurring cost after the initial cost of $9,450
   - Additional investigation/discussion is needed to determine the need to add Macrovision’s product
3. Microstation/STAAD/RAM – Critical: Fund Now ($10,000)
   - Noted that this is a college wide license and available to all departments
4. Networker Backup License – Imprudent: Do Not Fund ($3,000)
   - New software; ½ of the cost is paid for by the department (includes 3 years of maintenance)
   - Does not seem to be a very cost effective investment for backup
   - Do we need to investigate a backup software standard for across the college?
   - Is this necessary when the SAN is purchased?
   - Recommendation is to not fund contingent on implementation of SAN
Appendix

5. SigmaPlot – Opportune: Fund as Available ($5,000)
   • Available to all departments; recurring cost of $1,200
6. Timberline/MeansDB – Critical: Fund Now ($400)
7. TransCAD – Critical: Fund Now ($3,000)

**ECPE**

1. Altera Quartus – Critical: Fund Now ($1,500)
2. Altia – Critical: Fund Now ($1,000)
3. Ansoft HFSS – Critical: Fund Now ($1,500)
4. AWAS – Critical: Fund Now ($1,000)
5. Cadence – Critical: Fund Now ($3,000)
   • There is a research portion that pays for the other ½ ($3,000)
6. CodeSurfer - Critical: Fund Now ($1,000)
7. CST Microwave Tools – Critical Fund Now ($1,800)
8. ETAPS – Critical Fund Now ($1,000)
9. iLogix – Critical Fund Now ($1,000)
   • Software engineering course
10. Legato Backup Software – Imprudent: Do Not Fund ($5,000)
   • Forgo due to the upcoming SAN purchase
11. Mallard – Imprudent: Do Not Fund ($1,100)
   • Current professor is retiring; software does not expire until Jan 2008
14. Siemans/PTI PSS/E – Critical: Fund Now ($1,000)
15. Silvaco – Critical: Fund Now ($2,000)
16. Synopsys – Critical: Fund Now ($2,500)
17. VXWorks – Critical: Fund Now ($1,000)
18. WindRiver – Critical: Fund Now ($1,000)
19. Xilinx – Critical: Fund Now ($1,000)

**ECSS**

1. Legato Networker – Critical: Fund Now ($5,000)
   • Need: Our plan is to roll this into the SAN as the disaster recovery. This currently backs up 23 file servers. Keeping support maintenance high is needed while we are in transition. As new solutions are chosen we will make appropriate adjustments.
2. VMware Virtual Infrastructure Basic – Critical: Fund Now ($4,000)
   • We are beginning to get into virtual network server (jabber, afs.eng, home.eng, etc.) – very cost effective
   • This is a layer above what we are currently using (we use just the free product now) – this tool allows us to do live migration of machines, converting a hardware base machine to a virtual machine (and vice-versa)
   • Need is slightly less than critical

**ENGR Admin**

1. Graduation Planner - Inappropriate: Fund Elsewhere ($8,500)
   • Annual maintenance cost
   • An administrative tool/application – not appropriate for student fees

**IMSE**

1. Adobe Writer – Critical: Fund Now ($1,800)
   • Student requested, new purchase
   • Need appears to be greater for graduate students
2. PCDMIS - Critical: Fund Now ($15,000)
3. CPLEX - Critical: Fund Now ($1,000)
   • Annual maintenance, same software is used in ECpE
4. Lindo/Lingo - Critical: Fund Now ($1,500)
5. Magics RP - Critical: Fund Now ($1,560)
6. MasterCAM– Request covered at the college level (off-the-top) software; not at the department level
7. Mathematica - Critical: Fund Now ($3,000) (with recommendation as noted below)
   • ~$50,000/yr to maintain the campus license
- Four courses currently use this software
- Recommendation: Are there alternatives that should be investigated? What does it take to move this college wide?

8. Rapidform - Critical: Fund Now ($1,400)
9. Sigmanest - Critical: Fund Now ($3,000)
10. Solidcast - Critical: Fund Now ($200)
11. Vericut - Critical: Fund Now ($10,000) (with recommendation as noted below)
   - Recommendation: Investigate sharing between ME/IMSE
12. Special purpose software ($1,800)
   - See notes above under "Discretionary Operating Expense Software"
13. Drive Shield – no longer needed; remove from Operating Proposal

**ME**

1. Acronis – Imprudent: Do Not Fund ($600)
   - Did we standardize on Ghost for the college?
   - To convert would take staff time
2. Adobe Audition – Critical: Fund Now ($780)
   - Controls course
3. Adobe Encore DVD – Opportune: Fund as Available ($280)
   - Media center use
4. Adobe Illustrator – Opportune: Fund as Available ($180)
   - Media center use
5. Adobe PhotoShop – Opportune: Fund as Available ($570)
   - Media center use
6. Adobe Premiere Pro 2.0 – Opportune: Fund as Available ($600)
   - Media center use
7. Advant-Edge Third Wave Systems – Critical: Fund Now ($5,000)
8. CDS – Critical: Fund Now ($400)
9. COMSOL – included at the college level (off-the-top)
11. DFMA 2006 (Design for Manufacturability & Assembly) – Critical: Fund Now ($12,450)
   - New, has been in industry 5 years – desire to incorporate in coursework due to request from industry that students have a knowledge in this software
   - Recurring cost – none; perpetual upgrades provided
12. Diskkeeper – Opportune: Fund as Available ($400)
13. Drive Shield – Critical: Fund Now ($200)
14. General Software – Remove and add a line to the department Operating Proposal (as noted above)
15. GT-Power – Critical: Fund Now ($3,000)
   - If able to combine at college level department will not purchase
17. Log-Me In – Important: Fund as Appropriate ($250)
18. McAfee Desktop Firewall – Important: Fund as Appropriate ($170)
19. Netcam watcher Software - Inappropriate: Fund Elsewhere ($999)
   - Needs to be moved to the College Capital Proposal for cameras
20. Space Guard – Opportune: Fund as Available; roll into SAN solution($140)
21. SPIP – Critical: Fund Now ($8,007)
22. Veritax Backup – Opportune – Fund as Available; Contingent upon integration of the SAN ($500)

**MSE**

1. Endnote 10 – Opportune: Fund as Available ($2,300)
   - Not used in coursework but available in student labs (to maintain their own reference database)
   - Upgrade (version 10, current version is 9)
   - Will check if Key Server can be used
2. Photoshop CS 2 – Opportune: Fund as Available; if Keyserver can be used 3 licenses will be purchased ($2,800)
COLLEGE SOFTWARE PORTFOLIO

Software currently covered at the college level:

1. Abaqus
2. Ansys
3. AutoDesk
4. CrossOverOffice
   - Cost may increase; they are expanding their product
5. UGS Suite
6. FEMLab
7. Fluent
8. Intel C++
9. Intel FORTRAN
10. MasterCAM
11. Mathcad
12. MathType
13. Matlab
14. MSDNAA
15. National Instruments Acad. Bundle
16. Pro/Engineer + Pro/Mechanica
17. RedHat Enterprise Linix
18. Scientific Word
19. SolidWorks
20. Tecplot
21. WinjEDT
22. X-Win 32
23. GHOST
24. Matlab Student Download License
   - Include a request of $47,000 to cover the entire annual lease of the software (with $25,000 commitment if CAC proposal for Matlab is funded). If not funded by CAC; EFTF needs to determine the funding priority.
   - This is 5% of the budgeted income

This list only includes software that is not specific to a department. There are some software packages that are specific to a department but available to the entire college. Microstation & SigmaPlot were noted as software packages that are available to the college but specific/paid for at the department level.

COLLEGE OPERATINGEXPENSES

Lab Monitor cost – North Zone ($25,000) and South Zone ($12,000):

- North zone has longer hours with a larger number of systems and is working on reducing the cost and number of student hours needed to staff labs

Cleaning supplies, $1,700 needs to be increased

Printers
Printer maintenance kits are not currently covered off-the-top.

Are we currently replacing printers when they “need” replaced or only on a “cycle” (3 years)? Is there a way we can ensure that printing can be covered at anytime it needs to be, rather than including printer replacements as part of a lab proposal, or waiting until the proposal process if a printer dies?

Discussion tabled until Capital Project review
Appendix

NEXT STEPS

- Next meeting: Friday, March 16, 2007 from 1PM – 3PM (114 Marston)
- Adjust each department Operating Proposal to include Discretionary Operating Expense Software as noted in minutes
- McCoy/Alt to remove software that is part of the College Software Portfolio (off-the-top)
  1. MasterCAM (IMSE requested)
  2. COMSOL (ME requested)
- McCoy/Alt to update proposals to include the following proposals as the college level:
  1. HEAT (AerE requested)
  2. Maple (AerE requested)
  3. Keyserver (CCEE request only); department requests (ME/IMSE) will remain in the event that the college request is not approved
  4. Matlab Student Download License – Proposal request for the full $47,000
Appendix VI

eCRT Capital Project Panel Meeting Minutes

- 3/16/2007
- 3/21/2007
- 3/22/2007
- 3/26/2007
- 3/30/2007
Appendix

E C R T C A P I T A L P A N E L

114 Marston
Friday, March 16, 2007

Attendees:
Chris McCoy, John Dickerson, Alan Kuuttila, Josh Klesel, Steven Kovarik, Don Schlagel, Jim Wellman, Hap Steed, Mike Renze, Jamie Alt

DISCUSSION

Sweeney 12 14 & 1218 Lab Proposals
Duplication in submission, these are the same proposal. The correct amount is $12,000.

Review Process Suggestions

- Recommend that we ask departments to rank requests based on the departments greatest need (one to end)
- A weighting factor (the dollar per student impacted per semester) - a way to determine the impact of these proposals on students
- Generate a "rule of thumb" for labs to assist in determining which labs really need to have the newest technology and which labs can be maintained on "used" equipment (equipment passed down after a lab is replaced)
- Group the proposals in categories: (1) Computers/Printers (2) Replacement Proposals (3) New (not a replace) Proposals (4) TA Computers (5) Non-computer Related Hardware
  - Review if we really need to maintain the number of computers in each lab - with enrollment numbers changing do we need to maintain the number of machines in any specific lab
  - Enrollment numbers will always change and we need to utilize space effectively independent of enrollment
- Consider the yearly expense when evaluating a proposal; cost to sustain the lab
- How do these proposals meet the department's mission? (are these mission critical/important items)
- What is the student's top priority?
- Goals: To make a recommendation based on our technical knowledge
- Categories: Possible categories for the proposer to assist us in determining needs
  - Required: without funding, students will be adversely affected
  - Recommended: without funding, students may be adversely affected in a year or more
  - Exploratory: not required, but funding allows implementation of a distinctive opportunity for students
  - Discretionary: appropriateness is unclear, but students could benefit
- Age of equipment alone is not a reason to purchase new machines
- Cost per student per semester – find out how many students are in the courses that are impacted

Additional Input for Review:
Work with your department to rank your proposals (1 to end) and select a priority level

NEXT STEPS

- Additional input from your department EFTF Committee is needed: rank and select a category/priority
- Next meeting: Wednesday, March 21, 2007 from 2PM – 4PM (2220P Hoover). Come prepared to review the proposals from those departments that have completed the additional input.
ECRT CAPITAL PANEL

2220P Hoover Hall
Wednesday, March 21, 2007

Attendees:
Chris McCoy, John Dickerson, Alan Kuuttila, Josh Klesel, Steven Kovarik, Don Schlagel, Jim Wellman, Hap Steed, Mike Renze, Jamie Alt

DISCUSSION

Labs Criteria

- Determine what we need to standardize on in terms of equipment and other conditions that need to be followed
- Note if equipment and hours/access will be common with the college standard or be different for each lab proposal
- Current Dell pricing expires April 30th

ABE: ECRT PROPOSAL RECOMMENDATIONS

Improvements to Teaching/Open Lab in 201 I ED II (ABE Required, $40,500)

- eCRT Panel Recommendation: Critical: Fund Now, $46,100
- eCRT Panel Restrictions: Standard CoE system w/ dual-monitors; common access

Discussion:

- This is the lab that the department wants to build out as their core teaching lab

ABE Teaching/Open Computing Lab in 10A I Ed II (ABE Required, $37,500)

- eCRT Panel Recommendation: Critical: Fund Now, $35,800
- eCRT Panel Restrictions: Standard CoE System w/single monitor; common access

The Next Step in Engineering / Design Graphics: 3D Scanning (ABE Recommended, $3,000)

- eCRT Panel Recommendation: Important: Fund As Appropriate, $3,000
- eCRT Panel Restrictions: Report on use at the end of Fall 2007 – number of students using, type of use, etc.

Discussion:

- First part of a long-term project to also purchase a 3-D printer

Building a Workstation Open Lab Cluster in Davidson Hall (ABE Exploratory, $88,000)

- eCRT Panel Recommendation: Imprudent: Do Not Fund, $0
- eCRT Panel Restrictions: Consider other options. Resubmit next round. Investigate different options for FEA. Need to communicate the compelling need for this facility. Need to address computer need for 10 I Ed II.

Discussion:

- Lab currently has 620’s – working to get a high-end CAD lab for student course work
- Work to encourage students to use existing labs to determine use/demand before creating a new high-end lab
  - Are there systems available in the college right now that they could take advantage of now? ME has a new proposal for the same type of facility
- Economize on the systems: 745’s w/upgraded graphics (to be installed in 201)
- The real need is to replace 13 systems in I Ed II room 10 (which is where these old machines would go)
- Suggested compromise: 2332 workstations from AerE could be moved over (650’s) and an upgrade of graphics card

CBE: ECRT PROPOSAL RECOMMENDATIONS

Printer Replacements, 1150 & 2126 (CBE Recommended, $5,000)

- eCRT Panel Recommendation: Important: Fund as Appropriate, $5,000
- eCRT Panel Restrictions: Common standard printers
Appendix eCRT Capital Project Panel Meeting Minutes

Upgrade 2126 Sweeney Linux Lab (CBE Recommended, $40,000)

eCRT Panel Recommendation: Questionable: Fund Partially, $5,000

eCRT Panel Restrictions: Extend warranty 1 year.

Discussion:

- CFD work in an open lab does not work; encourages a re-boot before every login
- Configuration - basic 490; using Fluent
- Recommendation to use cluster/grid to meet need and extend the warranty for another year

Laptop Computers for Graduate Students (CBE Exploratory, $30,000)

eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0

Discussion:

- Pilot project, incoming graduate students only
- AerE has a similar program that is funded by the department (desktops)
- Needs to be pursued in a more broad way – identify the problem and identify a solution that can work for the entire college

CCEE: ECRT PROPOSAL RECOMMENDATIONS

196 Town Engineering (CCEE Required, $16,500)

eCRT Panel Recommendation: Critical: Fund Now, $14,200

eCRT Panel Restrictions: Standard CoE systems, common access. Purchase lower-cost projector (ISU standard). Installation cannot be funded.

Discussion:

- Classroom remodel was funded by the tuition surcharge
- Smart pad for annotating notes on power point – need?
- Projector cost ($900 for recently purchased, AerE) – request is for a high end projector

194 Town Engineering (CCEE Required, $23,350)

eCRT Panel Recommendation: Critical: Fund Now $10,150

eCRT Panel Restrictions: Standard CoE systems, common access. Cameras moved to College proposal. Purchase lower-cost projector, $2400 (ISU standard). Department to cover LCD display, cables and computer. Reduce to one color printer.

Discussion:

- Classroom remodel has been funded; request is for equipment to outfit 3 room complex (2 small breakout rooms and a large open space)

Surveying equipment Upgrade (CCEE Discretionary, $147,000)

eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0

NEXT STEPS

- Next meeting: Thursday, March 22, 2007 from 11AM – 3PM (2220P Hoover); short lunch break (brown bag lunch if you didn’t sign up for lunch at Wednesday’s meeting)
2220P Hoover Hall
Thursday, March 22, 2007

Attendees:
Chris McCoy, John Dickerson, Alan Kuuttila, Josh Klesel, Steven Kovarik, Don Schlagel, Jim Wellman, Hap Steed, Mike Renze, Jamie Alt

CCEE: ECRT PROPOSAL RECOMMENDATIONS

Classroom Upgrades in Town Engineering (CCEE Recommended, $14,500)
eCRT Panel Recommendation: Important: Fund as Appropriate, $10,000
eCRT Panel Restrictions: Reduce cost of projectors. Coordinate scanners and printers with college standards.
Discussion:
- Computer goes to 250 Town
- Printers for 220 and 210 Town (currently each room has 10 computers)
- Color scanner – in response to student requests
- Town 178 is a long room and will need a high power projector

Dual Displays for 134 Town (CCEE Exploratory, $9,000)
eCRT Panel Recommendation: Opportune: Fund As Available, $9,000
eCRT Panel Restrictions: Warranty needs to be matched with existing units.

LabVIEW cart (CCEE Exploratory, $3,300)
eCRT Panel Recommendation: Important: Fund As Appropriate, $1,550
Discussion:
- Possible opportunity for NI grant money?
- Can be opened to the entire college (may not travel well outside of the building)
- AerE has two carts that are similar, ChemE has some faculty that would have interest if this was available

206 & 290 Town Engineering Classroom Upgrade (CCEE Exploratory, $12,850)
eCRT Panel Recommendation: Questionable: Fund Partially, $1,500
eCRT Panel Restrictions: Limit EFTF funding to ½ cost of projectors (limit to $1500 models & coordinate across college); department covers remaining items and other ½ of cost. Installation cannot be included.
Discussion:
- Estimates are from ITC
- Stretches the limits of what EFTF funds are designated for; this is a university classroom (we do not have priority in reserving university classrooms)

MSE: ECRT PROPOSAL RECOMMENDATIONS

Lab Upgrade for 3337 Hoover (MSE Recommended, $25,300)
eCRT Panel Recommendation: Imprudent: Do Not Fund, $0
eCRT Panel Restrictions:
Discussion: More appropriate to synchronize with other Hoover lab replacements, usability is still good
IMSE: ECRT PROPOSAL RECOMMENDATIONS

**Sweeney 1218 Upgrade (IMSE Required, $12,000)**
eCRT Panel Recommendation: Critical: Fund Now, $12,000

**Black 0010 Upgrade (IMSE Required, $15,000)**
eCRT Panel Recommendation: Questionable: Fund Partially, $1,000
eCRT Panel Restrictions: Extend warranty and resubmit next year
Discussion: Current equipment could meet the need for another year if needed, extend warranty.

**Learning Portal Server Replacement (IMSE Required, $7,000)**
eCRT Panel Recommendation: Critical: Fund Now, $7,000
eCRT Panel Restrictions: Size appropriately
Discussion:
- Equipment is part of a learning portal – setup with four other universities (exchange program). TA's design the coursework which is done online.

**IMSE & ME – Video Conferencing Capabilities in 3035 Black (IMSE/ME Recommended, $8,180)**
eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0
eCRT Panel Restrictions: More appropriate to be dealt with by EDE
Discussion:
- Look into EDE portable system
- Requires a lot of technician time to setup and keep running (VetMed had to hire a set of staff to keep it running)
- ECpE working towards a similar setup and in discussions with EDE were advised against Polycom

ECSS: ECRT PROPOSAL RECOMMENDATIONS

**ENGR GRID – PHASE 1 (ECSS Exploratory, $150,000)**
eCRT Panel Recommendation: Questionable: Fund Partially, $150,000
eCRT Panel Restrictions: Concerns: Can’t differentiate sponsored research (same as all other resources); Not itemized (costs); Lack of clear substantial classroom use/demand; Significantly increasing recurring expense; Other/matching funding sources;
Discussion: (Tabled for further discussion pending itemized cost breakdown)
- Stage one of a multi-year project, includes a 16 node cluster (no desktops)
- Where are the needs that demand this? Where is the high computation use? How do we build up the infrastructure that maximizes the computational resources without having to disperse it as much – find these things and transition to it. To transition into using a grid we need to get a grid.
- Would this be used for research?
  - It is near impossible to know if a student is using a computer for class or research; the same can be said for all other resources purchased with EFTF funds
  - This is an attempt to change the level of computing, some does cross over to research, but this is not an attempt to focus our resources on research
- With our current structure this would not benefit undergraduate students;
  - Enables solving ever increasing large engineering problems & changes the paradigm of computational computing – all computational computing is moving towards grid computing
  - This has a lot of different uses, beyond high computation
  - The college is moving towards a graduate supported environment
- A shared funding perspective (where research faculty or departments contribute to the cost) should be explored
- What is our immediate use “need”? 60-70 sockets
  - Pilot the minimum to get buy and fund just what we need to get going
- eCRT to review after additional information is provided in cost estimate
Virtualization Server Expansion (ECSS Recommended, $8,200)
eCRT Panel Recommendation: Questionable: Fund Partially, $4,100
eCRT Panel Restrictions: Use freed servers by the SAN project; possibly purchase more memory for older servers; cost sharing
Discussion:

- ECSS to purchase some equipment w/current FY funds

Lab Upgrade for 2260 Hoover (ECSS Recommended, $22,400)
eCRT Panel Recommendation: Questionable: Fund Partially, $1,500
eCRT Panel Restrictions: Fund printer only

Lab Upgrade for 2264 Hoover (ECSS Recommended, $20,900)
eCRT Panel Recommendation: Opportune: Fund as Available, $20,900

Lab Upgrade for 2268 Hoover (ECSS Recommended, $64,220)
eCRT Panel Recommendation: Questionable: Fund Partially, $3,400
eCRT Panel Restrictions: Extend warranty for $3,400
Discussion:

- Would have to extend the warranty if we don’t replace (at $177 ea)
- A classroom setup with Linux and utilization is poor for the setup of the room (teaching environment) – would it be advisable to expand this room to Windows and move Linux to 2228 Howe or dual boot systems
- Opportunity to do some consolidation or redistribution
- Desktop PCs next year with Windows/Linux dual boot (tie w/grid) – standard 745 workstation

Lab Upgrade for 2255 Hoover (ECSS Recommended, $20,900)
eCRT Panel Recommendation: Imprudent: Do Not Fund

ECPE: ECRT PROPOSAL RECOMMENDATIONS

Coover 1301 Computer & Printer Upgrade (ECPE Required, $22,500)
eCRT Panel Recommendation: Critical: Fund Now, $22,500
eCRT Panel Restrictions: Use college standard equipment, common access

Coover 3201 Computer Upgrades (ECPE Required, $6,000)
eCRT Panel Recommendation: Critical: Fund Now, $0
eCRT Panel Restrictions: Recycle old equipment (less than 3 years old from general pool)
Discussion:

- 270's could suffice if there were some available to pass down; facility has lower utilization

Coover 3223 Computer Upgrade (ECPE Required, $9,000)
eCRT Panel Recommendation: Critical: Fund Now, $9,000
eCRT Panel Restrictions: Investigate VMWare solution first, buy desktops if virtual solution is not workable.
Discussion:

- A lot of distance Ed students taking this course and software doesn’t work on terminal service; 10 “headless” machines (students remote in)

Coover Server Upgrade (ECPE Required, $18,148)
eCRT Panel Recommendation: Critical: Fund Now, $0
eCRT Panel Restrictions: Fund as part of the ENGR Grid Phase I.
Discussion:

- A good co-proposal with the grid; if this were funded the hardware cost here could be subtracted from the grid proposal
Coover 1125 Computer Upgrade (ECPE Recommended, $12,000)
ECRT Panel Recommendation: Critical: Fund Now, $600
ECRT Panel Restrictions: Extend warranty.
Discussion: Extend warranty; new machines not needed this year

Coover 1207 Computer Upgrade (ECPE Required, $16,500)
ECRT Panel Recommendation: Critical: Fund Now, $16,500
ECRT Panel Restrictions: For 11 systems using standard configuration and common access

Coover 2205 Computer Upgrade (ECPE Required, $27,000)
ECRT Panel Recommendation: Critical: Fund Now, $27,000
ECRT Panel Restrictions: Use standard configuration and common access

Coover 1212 Computer & Printer Upgrade (ECPE Required, $33,000)
ECRT Panel Recommendation: Questionable: Fund Partially, $17,000
ECRT Panel Restrictions: Purchase new Linux systems w/dual monitors, wait to upgrade new Windows systems when new Building is open. (10-Linux)

Robotics & Measurement as a Backdrop for CE and SE Problem Solving (ECPE Required, $5,600)
ECRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0
ECRT Panel Restrictions: Concerns: This is a gray area for EFTF; it’s external electronic equipment; outside the scope of EFTF?
Discussion:
  - Is this EFTF appropriate? Lab equipment for a specific discipline
  - Purpose – to better engage students in beginning courses for retention

NEXT STEPS

- Next meeting: Monday, March 26th, 2-4PM in 2220P Hoover
Appendix

**ECRT CAPITAL PANEL**

2220P Hoover Hall
Monday, March 26, 2007

**Attendees:**
Chris McCoy, John Dickerson, Alan Kuuttila, Josh Klesel, Don Schlagel, Jim Wellman, Hap Steed, Mike Renze, Jamie Alt (Steven Kovarik out)

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**ECPE: ECRT PROPOSAL RECOMMENDATIONS**

- **Coover 1212 O-Scope Upgrade (ECPE Discretionary, $40,000)**
  - eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0
  - eCRT Panel Restrictions: There is no doubt these are needed, but seems inappropriate for EFTF.

- **Coover Plotter Replacement (ECPE Exploratory, $20,000)**
  - eCRT Panel Recommendation: Inappropriate: Do Not Fund, $0
  - eCRT Panel Restrictions: Use printing services or use 48” plotters in other departments

  **Discussion:**
  - Mainly used for senior design. Paper and ink are not included in this cost; this is for equipment only
  - Other departments send students to printing services

- **Durham Antenna/Microwave Labs Upgrade (ECPE Discretionary, $90,000)**
  - eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0
  - eCRT Panel Restrictions: Should be done, but EFTF is not the appropriate funding source

- **NDE Lab Hardware Upgrade (ECPE Discretionary, $100,100)**
  - eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0
  - eCRT Panel Restrictions: Probably needed, but not appropriate for EFTF funding

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**AERE: ECRT PROPOSAL RECOMMENDATIONS**

- **Howe 2332 A/V (AERE, $10,000)**
  - eCRT Panel Recommendation: Critical: Fund Now, $10,000
  - eCRT Panel Restrictions: Needs to be funded in order to accommodate multi-lab switch with Howe 2228 and Hoover 2268

  **Discussion:**
  - Coordination is needed with other Howe and Hoover labs:
    - 2332 Howe (Linux, 28 systems, 28 students) – Linux lab currently on 5th year, needing replaced
    - 2228 Howe (Windows, 19 systems, 36 students) – Windows lab currently needing replaced
    - 2268 Hoover (Linux, 19 systems, 36 students) – Linux lab equipment being replaced and could be redistributed somewhere else
  - This was approved to be replaced before the new EFTF Process and has still not been upgraded. In re-examining the needs propose instead of replacing we use these funds to upgrade 2268 this year and move this equipment to another facility.
  - Needs: 1 “appropriate” Linux teaching lab (minimum w/ 18-25 students/section max)
    - Current Linux options: 2268 and 2332 (outside of Coover facilities). There is some risk in having only 1 teaching facility for Linux.
      - With a grid we could have Linux on a standard desktop system

**Options Under Review:**

1. Option One - $190,200
   - Upgrade 2332 Machines (new workstations) plus an AV upgrade $112,000 + $10,000;
   - replace 2268 w/desktop systems ($28,500); could be left alone for 1 more year
2. **Option Two** – $104,500
   - New 2228 w/workstation systems ($76,000)
   - 2268 Windows desktops ($28,500)
   - Re-deploy 19 systems (from 2268) ($?)

3. **Option Three** - $104,500
   - Replace 2268 w/workstation ($76,000)
   - Replace 2228 Windows desktops ($28,500)
   - Loss in seats and loss in deployment are downsides

4. **Option Four**
   - Upgrade 2228 Howe w/Linux (Extend warranty)
   - Keep 2268 Hoover as Linux (New hardware)
   - 2332 transition to Windows (take your chances; repurpose existing Linux)

**Conclusion:**

- Replace 2332 w/new workstations running Linux ($112,000 + $10,000)
  - ModifyFY08 2332 proposal to be for A/V portion only
- Replace 2228 w/desktop systems ($28,500)
- Extend 2268 warranty (Windows/Linux)

**Howe 2362 Computer Upgrade (AERE, Required $18,000)**

- eCRT Panel Recommendation: Critical: Fund Now, $18,000
- eCRT Panel Restrictions: System must be managed within the college paradigm. Perhaps systems from 2232 would be appropriate. Examine the level of machine and tailor accordingly.

**Discussion:**

- Was funded by another source; funding has been reduced/eliminated. One full-time staff member manages the lab (1/2 AerE and ½ ECpE – Matt Nelson).
- Are there other facilities that can be used?
  - There are projects student complete in this lab that they could not do in other labs

**DAQ System Replacement (AERE, Required $11,500)**

- eCRT Panel Recommendation: Critical: Fund Now, $11,500
- eCRT Panel Restrictions: Check with NI to determine if gifts can be arranged for new DAQ cards/modules. Consider using repurposed equipment and/or laptops.

**Discussion:**

- Two cart systems used in numerous courses; systems are 6 years old and too slow for course work, DAQ cards are 8 years old
- Could use repurposed 270’s if available? – Reliability may not be good enough and could cause labs to be cancelled

**3D CAD/CAM Station (AERE, Required $26,840)**

- eCRT Panel Recommendation: Questionable: Fund Partially, $26,840
- eCRT Panel Restrictions: Guidance from EFTF is necessary to determine appropriateness. This appears to be something that is needed and is in the “gray” area for support – it is an output device, but it’s a modeling tool. It’s clearly on the fringe. If department funds CNC router, EFTF should fund the workstation.

**Discussion:**

- CNC router is not much different than a 3-D printer; a device connected to the PC. A critical component and there is currently not one available in the college for students to use (AerE has a 2-D).
- Other departments would use if available – intent would be that it is open to anyone who needs it
- Concerned we are opening a door / setting a precedence (Is the classification as input vs output device for a computer a good measure for level of appropriateness?)
- Can the 3-D scanner fit together with this?
- Being used to generate a CAD product that you do on the computer (this is non-functional w/o the computer)
ECRT CAPITAL PANEL

3.27.07

2220P Hoover Hall
Tuesday, March 27, 2007

Attendees:
Chris McCoy, John Dickerson, Alan Kuuttila, Josh Klese, Steven Kovarik, Don Schlagel, Jim Wellman, Hap Steed, Mike Renze, Jamie Alt

AERE: ECRT PROPOSAL RECOMMENDATIONS

Howe 2228 Computer Upgrade (AERE, Required $38,000)
eCRT Panel Recommendation: Critical: Fund Now, $28,500
eCRT Panel Restrictions: Needs to be coordinated with Howe 2332 and Hoover 2268; standard configuration and access.

Terminal Server (AERE, Recommended $4,000)
eCRT Panel Recommendation: Important: Fund as Appropriate, $4,000
eCRT Panel Restrictions: Restructure ENGR terminal servers into a single pool that can be shared by all departments for all users. Coordinate with existing services in ECpE and ECSS and consider repurposing file servers being transitioned to the SAN solution.

Discussion:
- ECpE Load is not much over 20-30 users on father.ece; AerE has had students complain that it is slow
- AerE would plan to make it part of a pool, they already have one server in Durham
- Current: father (a group of 3), meryleng (1), AerE has 1, and there is a bank of remote access Linux machines
- Can we systematically build out a terminal services solution that benefits everyone?
  - Management would be problematic

Howe 2228 Printer Replacement (AERE, Required $5,000)
eCRT Panel Recommendation: Important: Fund as Appropriate, $5,000
eCRT Panel Restrictions: Coordinate with a consensus solution for printing. This solution needs to be floor-standing and should print color if cost-effective, otherwise BW.

Discussion:
- Hoover labs currently use Dell 5120, has printed 280,000 pages and cost $1100 – is there a more economical solution?
- 18 seat lab – is this size needed? A floor standing unit is needed b/c there is no desk space available.

Howe 142 Printer Replacement (AERE, Required $5,000)
eCRT Panel Recommendation: Important, Fund as Appropriate, $2,000
eCRT Panel Restrictions: Printer is needed for 142. Discuss MFP options and consider if college consensus is reached on appropriate options.

Discussion:
- Would support grad students who have offices in the basement; proposal would replace B&W printer in 2344 with a similar color unit and put the older B&W one in 142.
- 2344 currently has 2 B&W printers in the lab; students are requesting color scanning capabilities
- Current printer is also a scanner/copier – only copy machine available to students in the college.
  - Students can copy by scanning and printing using their print quota
- Recommended solution: Two 8100’s need replaced – replace w/a suitable B&W solution and keep all the scanning/printing machines as is

Howe 2344 Monitor Addition (AERE, Recommended $8,500)
eCRT Panel Recommendation: Opportune: Fund as Available, $8,500
eCRT Panel Restrictions: Though 20” displays are costly, it does not make sense to split the lab. This facility should be used for scheduled courses from other departments.
Discussion:

- Request comes from student year-end survey. Dual display would be on new workstations.
- Huge price difference between 19” and 20” display – almost double in cost
- Scheduled courses would be encouraged; this is not currently being used as a classroom

**Presentation Laptop (AERE, Required $2,000)**

*eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0*

*eCRT Panel Restrictions: Equipment is needed, but it is more appropriate to fund in the South Zone Media Center and open that resource to ME, IMSE, MSE and AerE students.*

Discussion:

- Equipment would be available at main office for check-out by students, in addition to a projector for students. There are no laptops currently available in AerE for student checkout.
- Departments who have this service available: 3 ECpE (department funded), 25 in ME/IMSE Media Ctr., 4 in IMSE, 5 ABE, 2 CBE, 3 MSE
- ME/IMSE Media Center: Reservations can be done in advanced but students walk in and checkout laptops (up to 3 days), projectors just during the day (unless special need noted). 7:30-5:30 student staffed
  - Software: a certain # of machines have the additional software such as CAD and those are checked out if requested
  - Durham makes you sign a contract that students could be charged if equipment is lost/damaged, etc.
  - 5 of the 25 are tablets
- Recommendation to open the Media Center to AerE, IMSE, ME, MSE for the next academic term

**Door Programming Tools (AERE, Recommended $1,000)**

*eCRT Panel Recommendation: Imprudent: Do Not Fund, $0*

*eCRT Panel Restrictions: Try to coordinate a south-zone solution for next fiscal year.*

Discussion:

- Multiple databases could be an option

**Laptops for Lecturers (AERE, Recommended $4,000)**

*eCRT Panel Recommendation: Questionable: Fund Partially, $4,000*

*eCRT Panel Restrictions: EFTF committee needs to determine appropriateness of this expenditure in light of all other needs. Should department fund resources specifically for the role of these staff?*

Discussion:

- Laptop would be in the possession of a lecturer and used only by that lecturer for the class
- Other departments have purchased with department funds; this is a function of the instructors job

**Digital Signage for Main Office (AERE, Exploratory $5,500)**

*eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0*

*eCRT Panel Restrictions: Departments should be funding this.*

**ECPE: ECRT PROPOSAL RECOMMENDATIONS**

**Power System Simulator Lab for Undergraduate and Graduate Instruction (ECPE Required, $65,000)**

*eCRT Panel Recommendation: Important: Fund as Appropriate, $20,000*

*eCRT Panel Restrictions: Fund server now. Resubmit proposal for desktops next year. System will not be connected to college network/services.*

Discussion:

- Request needs adjusted to be for the server only (will request new computers when new building opens)
- Currently there is no training facility anywhere in the nation – looking to create a facility that will pull in more power engineering students (will become the core facility for the power engineering group)

**NEXT STEPS**

- Next meeting: Wednesday, 9-11 AM, 2220P Hoover
Appendix eCRT Capital Project Panel
Meeting Minutes

ECRT CAPITAL PANEL

1235 Howe Hall
Thursday, March 29, 2007

Attendees:
Chris McCoy, John Dickerson, Alan Kuuttila, Josh Klesel, Steven Kovarik, Jim Wellman, Hap Steed, Mike Renze, Jamie Alt (Don Schlagel absent)

ME: ECRT PROPOSAL RECOMMENDATIONS

Memo – will be included in the notes but will not be included in our process; we no longer do departmental budgets like we used to.

Hoover Break Out CAD Design Room Upgrade (ME Required, $30,000)
eCRT Panel Recommendation: Critical: Fund Now, $21,000
eCRT Panel Restrictions: Coordinate configuration to be same solution as Howe 2332 -- ~Dell 390, FX 3450 graphics card, 4GB RAM, single disk, dual 19" (except breakout room)

Discussion:
- Initially equipment was purchased with a gift.
- System Admin computer is for Larry Hanft; mechanical lab manager who specializes in assisting students with CAD
- Workstation need? High end to coordinate with the equipment that will be purchased for 1020 (CAD Lab)
  - Is there a change in curriculum or need that warrants the need for higher end equipment?
  - The workstations double the cost of the desktops
  - The graphics card is the main issue
  - Current configuration price checked for a 390 (w/3450 graphic card, 4 gig ram, single large disk) ~ $2,500 (w/no display)
- Display replacement is needed – one died this week: needs to be large enough students can see, high resolution
  - Plan to handle them as they die
- Smartboards are not needed

ME/IMSE Media Center Upgrade (ME Required $33,450)
eCRT Panel Recommendation: Critical Fund Now: $27,000
eCRT Panel Restrictions: Announcement to students in the South Zone (AERE, MSE, IMSE, ME) informing them of what’s available to them. Create standard procedures & policies. Move security camera to college project; Check for repurposed desktop systems before investing in new ones. EFTF Committee needs to verify that projectors and digital cameras (not security) are appropriate expenses.

Discussion:
- Desktops: 1 for checking out, 1 hooked to plotter and 1 inside the door used for digital picture downloading and connected to a scanner
- South Zone Media Center – to cover all departments in the south zone
- Create a more formal process to notify students what is available
- Digital camera is ~ $400
- Laptop $1100 standard configuration

Course Development Mobile Systems (ME Required $11,400)
eCRT Panel Recommendation: Questionable: Fund Partially, $1
eCRT Panel Restrictions: The need is real. The question is whether or not EFTF or EDE should meet this need. EFTF Committee needs to determine appropriateness of this expenditure in light of all other needs. Should department fund resources specifically for the role of these staff? The Dean needs to determine priority of this type of activity (on-line courses) and where is most appropriate to coordinate this – EFTF, EDE, department. Use existing tablets from CCEE. The amount depends upon solution determined.

Discussion:
- 4 systems to give to a faculty member for the entire semester so he can develop his course and it can be put into streaming media (currently three faculty doing this now on borrowed equipment, from EDE and others)
- CCEE did this last year, purchased 4 Gateway tablets, and they are now being used only as a laptop (not tablet) – Josh has requested they be given to ME to be used as tablets
- Needs coordination with EDE (they are moving to Adobe Breeze) – Caution: This really falls under the realm of EDE to provide these facilities
- Department should at least share in cost as faculty member is heavily utilizing this system; not explicitly for course development

**Black 1059 Internal Combustion Engines & Design (ME Required, $4,600)**
eCRT Panel Recommendation: Critical: Fund Now, $4,600
eCRT Panel Restrictions: Use standard system (Optiplex) with increased hard disk space (perhaps two hard drives) and display

Discussion:
- Shaft encoder? Sends out digital signals.

**Black 1020 Computer Design Room (ME Required, $90,300)**
eCRT Panel Recommendation: Critical: Fund Now, $61,000
eCRT Panel Restrictions: Coordinate configuration to be same solution as Howe 2332 – Dell 390, FX3450 graphics card, 4 GB RAM, single disk, dual-19” (~$2900)

Discussion:
- Are larger monitors needed with the 390’s?

**Black 1012 Open Computer Lab Upgrade (ME Required, $64,500)**
eCRT Panel Recommendation: Critical: Fund Now, $64,500
eCRT Panel Restrictions: Use standard configuration and access

**Black 0083 Open Computer Lab Upgrade (ME Required, $19,500)**
eCRT Panel Recommendation: Critical: Fund Now, $19,500
eCRT Panel Restrictions: Shift tube displays from 1020; Use standard configuration and access (no monitors)

Discussion:
- 83 has specialized software that is not installed in the 1012 open lab (ex: SPIP, engine lab software)

**NEXT STEPS**

- Next meeting: Friday, 1-3 PM, location TBD
The ME Computer Committee prioritized our EFTF Funding Request. Our results are shown in the table below. Prior to the new budget model, the ME department had been setting aside about $90,000 per year to provide funds for periodic upgrades, which were due this year. Under the new budget model, we lost these funds. For this reason, we feel that most of the funding that we are requesting is critical.
# Mechanical Engineering EFTF 2007 Capital Projects

<table>
<thead>
<tr>
<th>Group</th>
<th>Project Description</th>
<th>Cost</th>
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<td>Group 1</td>
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**ME Request**

404750
ECRT CAPITAL PANEL

1234 Howe Hall
Friday, March 30, 2007

Attendees:
Chris McCoy, John Dickerson, Jim Wellman, Alan Kuuttila, Josh Klesel, Steven Kovarik, Hap Steed, Mike Renze, Jamie Alt (Don Schlagel, absent)

DISCUSSIONS

Repurposed Equipment
- Need to have further discussion on storage for systems that are coming out but could be re-purposed or saved for parts. Determine which labs are used for teaching and which are open labs (keep a record to better track).
- Need to figure out which facilities work for “trickle down” systems (systems that are re-purposed).

Cameras
- Need to include a capital project for cameras requested: identify need, dollar amount, solution and standard equipment to use.
- NetcamWatcher Pro is the proposed software solution.
- Is the “use” of cameras appropriate for EFTF? Are we trying to solve a problem that doesn’t exist?
- Cameras mean implied security, increasing your liability to provide safety and protection for people.
- A college solution means we need to talk with DPS so we know our boundaries, legally.

A sub-group should meet to work out details and submit a Capital Project proposal by Wednesday.

ME: ECRT PROPOSAL RECOMMENDATIONS

**Black 1051 Manufacturing Lab (ME Required, $12,600)**
- eCRT Panel Recommendation: Important: Fund as Appropriate, $12,600
- eCRT Panel Restrictions: Use college standard desktops, w/dual-displays (best price-point between 19”/20”)

Discussion:
- These machines are better than the Hoover machines that we’re waiting to replace
- It doesn’t make sense to put re-purposed machines in these labs

**NEL 102 Open Computer Lab (ME Required, $9,000)**
- eCRT Panel Recommendation: Important: Fund as Appropriate, $9,000
- CRT Panel Restrictions: Use college standard desktops

**Black 0095D Grad Computer (ME Required, $18,000)**
- eCRT Panel Recommendation: Important: Fund as Appropriate, $13,500
- eCRT Panel Restrictions: Use college standard desktops, single monitor

**Black 2070 Computer Lab (ME Required, $6,000)**
- eCRT Panel Recommendation: Imprudent: Do Not Fund, $0
- eCRT Panel Restrictions: Wait for next year – resubmit or identify newer equipment to rotate into this facility.

Discussion:
- These machines could be replaced with re-purposed machines; general purpose machines

**Black 2081 Instrumentation Lab Upgrade (ME Required, $9,600)**
- eCRT Panel Recommendation: Imprudent: Do Not Fund, $0
- eCRT Panel Restrictions: Keep running using recycled equipment for spares-parts.

Discussion:
Would rather re-submit and change every 5 years than use re-purposed equipment because of the special cards that are part of these machines.

**Black Room 0066 Upgrade (ME Required, $16,100)**
eCRT Panel Recommendation: Questionable: Fund Partially, $3,500
eCRT Panel Restrictions: Purchase new printer and projector (Standard college equipment. Keep running using recycled equipment for spares/parts. Resubmit next year. Security camera to be added to college project.)

**Black Small Teaching Lab Upgrade (ME Required, $11,700)**
eCRT Panel Recommendation: Imprudent: Do Not Fund, $0

Discussion:
- Can a re-purposed printer be found? – ECSS has several

**Hoover 1360 Mechatronics Lab (ME Required, $12,000)**
eCRT Panel Recommendation: Imprudent: Do Not Fund, $0
eCRT Panel Restrictions: Use recycled computers for spares. Resubmit next year.

**Multimedia Center for Rm 3004-3006 Black (ME Recommended, $8,000)**
eCRT Panel Recommendation: Questionable: Fund Partially, $2,500
eCRT Panel Restrictions: Use same decision from last year – fund 50% of equipment (wiring and furniture cannot be purchased). ME and IMSE will share remaining cost and schedule the facility.

Discussion:
- Was approved last year but the Interim ME Department Chair decided not to support their part of the funding and the project was not completed

**Student Advising-Process Improvement (ME Exploratory, $3,000)**
eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0
eCRT Panel Restrictions: Probably very worthwhile, but not appropriate for EFTF

Discussion:
- Administrative tool for advisors, inappropriate

**Oscilloscopes Upgrades (ME Recommended, $20,000)**
eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0
eCRT Panel Restrictions: Very needed, but probably not appropriate for EFTF.

**Manufacturing Lab Improvement (ME Recommended, $25,000)**
eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0
eCRT Panel Restrictions: Needed, but probably not appropriate for EFTF funds.

**ECPE: ECRT PROPOSAL RECOMMENDATIONS**

**Coover 1301 Intro to Embedded Systems (ECPE Required, $16,000)**
eCRT Panel Recommendation: Inappropriate: Fund Elsewhere, $0
eCRT Panel Restrictions: This seems critical to the needs of the course, but appears to be outside the scope of EFTF. This is a clear need without a home for funding.

Discussion:
- TechBot – programmable robots; a subject matter piece of equipment – the computer is used to “extend” to this external piece
- This is used as the object of study for this course

**Coover Senior Design Laptop Upgrade (ECPE Required, $1,700)**
eCRT Panel Recommendation: Critical: Fund Now, $1,100
eCRT Panel Restrictions: Use standard configuration.
**ALC Computer & Printer Upgrades (ECPE Recommended, $109,400)**

**eCRT Panel Recommendation:** Important: Fund as Appropriate, $52,300

**eCRT Panel Restrictions:** Replace 32 student computers, color printer, and scanner. Wait on TA computers and 46” flat-panel displays (resubmit next year). Use standard desktop configuration.

**Discussion:**

- TA computers could make it another year (28 machines requested at $1500) & hold on flat screens until next year

**NEXT STEPS**

- Camera Proposal needs to be submitted by Wednesday, April 4th
## EFTF Multi-Year Balance Sheet

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* Real & estimated savings from unexpended allocations (returned to general pool)
** Fee income should increase due to the increase in student base in ABE (inclusion of AST)
*** Printing costs, lab monitor and supplies are shifted from dept to college-level, starting FY2008
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