DATE: August 29, 2014
TO: Computation Advisory Committee
FROM: Belinda Schafbuch, Fiscal Officer
RE: Fiscal Year 2014 Computation Advisory Committee Report

On behalf of the College of Engineering, I am sending you this requested summary report of all student technology fee income, expenditures and carryover funds.

A. Summary Page:
A summary page is attached to this email. It provides an overview of all College of Engineering technology fees including: carry forward from FY13 ($1.1M); funds received ($2.8M); expended ($2.3M); and carry forward to FY14 ($1.6M).

B. Carryover Totals:
The June 30, 2014 carry forward cash balance in the College’s technology fee accounts was $1,592,310, as compared to $1,093,489 one year ago. These funds are available to our department chairs to spend in support of student learning. The College’s approach to the management of financial resources involves both local and central decision making to meet the needs of the student population. Department chairs have the flexibility to use as needed. They formulate plans and propose expenditures as they make decisions throughout the year.

C. Current Year Narrative:
The College had allocated technology fee revenue proportionally to the academic departments based on the enrollment of the students and the amount of instruction taught. This has been the practice for 4 years now, beginning in FY11, and provides an incentive for the recruitment, retention, and academic success of students.

The FY14 student technology fee income allocated to the college was estimated to be $2.7 million. A portion “off the top” was used to support central computing that benefits the entire college. The remaining was allocated to the academic departments. This model supplants the previous approach in which departments submitted proposals for central review and competition. The intention and philosophy here is to an administrative overhead and improve the ability of departments to allocate resources under local control for the benefit of student learning. Actual revenue exceeded estimates by $129,226, totaling approximately $2.8 million. The majority of expenses paid from all of these funds were in the ISU class code category for “services, information, and communications.” The attached summary page shows the allocations made to each department and project including college-wide operational expenses, computer lab upgrades, and a software portfolio.

The estimated fall 2014 enrollment is anticipated to exceed 8,900 engineering students. These student technology fees are used to reach the college’s highest priority of improving the quality
of the student learning experience including improving the quality and quantity of space needed to achieve this aim.

D. Expenses requiring CAC Approval:
Attached is a summary of the pre-approved unusual expenses. In addition to the CAC annual audit process, we have reviewed e-Data and believe this complies with the CAC reporting guidelines.

Thank you.

CC: S Rajala, G Mirka, A Somani, R Cox, L Genalo, M Sasse, E Reints
## CAC Allocations and Expenditure Summary

### Thru Fiscal Period Jun 2014

#### Allocation and Carryover

| FY2014 Allocations | 2,629,226.13 |
| FY2013 Carryover | 1,093,488.65 |
| Total Available - FY2014 | 3,722,714.78 |

#### Expenditures

| Expenditures - FY2014 | 2,130,405.38 |
| Project Commitments yet to be realized | 1,592,392.50 |
| Total Expenditures (real and projected) | 3,522,714.78 |

### Yearly Beginning Cash Balance

<table>
<thead>
<tr>
<th>Resource Unit</th>
<th>Account</th>
<th>Account Name</th>
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<tbody>
<tr>
<td>RU-ENGINEERING</td>
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<td>TECHNOLOGY FEES-ENGR</td>
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<td></td>
<td>1002088</td>
<td>ENGR COLLEGE COMP LAB UPGRADES</td>
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<tr>
<td></td>
<td>1002089</td>
<td>EFTF ABE</td>
</tr>
<tr>
<td></td>
<td>1002090</td>
<td>EFTF MSE</td>
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<tr>
<td></td>
<td>1002091</td>
<td>EFTF CBE</td>
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<td></td>
<td>1002092</td>
<td>ECFP EFTF</td>
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<tr>
<td></td>
<td>1002094</td>
<td>EFTF IMSE</td>
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<tr>
<td></td>
<td>1002095</td>
<td>EFTF ME</td>
</tr>
<tr>
<td></td>
<td>1002096</td>
<td>EFTF AERE</td>
</tr>
<tr>
<td></td>
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<td>1002099</td>
<td>EFTF OPERATIONAL EXPENSES</td>
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<tr>
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<td>1002100</td>
<td>EFTF SOFTWARE PORTFOLIO</td>
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### Yearly Expenditures

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<td>WAGES</td>
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<td>BENEFITS</td>
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<td>TRAVEL &amp; TRANS</td>
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<tr>
<td>SERVICES &amp; IT</td>
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<tr>
<td>SUPPLIES</td>
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<tr>
<td>MAINT &amp; REPAIR</td>
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<td>2,649.82</td>
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<td>MISC EXPENSES</td>
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<td>EQUIPMENT &amp; COLLECTIONS</td>
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### Current Cash Balance

<table>
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<table>
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<th>FY2014</th>
<th>FY2013</th>
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<tr>
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### Current Free Balance

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<th>FY2013</th>
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</table>
# CAC Requests for Advance Approval of Unusual Expenses

**Thru Fiscal Period Jun 2014**

<table>
<thead>
<tr>
<th>Resource Unit</th>
<th>Dept &amp; Location</th>
<th>Description</th>
<th>Total Project Cost</th>
<th>CAC Funds Requested</th>
</tr>
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<tbody>
<tr>
<td>Engineering</td>
<td>ME; 1233 and 1348 Hoover</td>
<td>Purchase 24 chairs for 1233 Hoover and 1348 Hoover as more space is needed for students to design and assemble projects. Use of computers is a required aspect of the design process.</td>
<td>8,389.20</td>
<td>8,389.20</td>
</tr>
<tr>
<td>CCEE; 194 Town</td>
<td>Provide four additional computer desks and chairs in Town 194.</td>
<td>2,849.35</td>
<td>2,849.35</td>
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</tr>
<tr>
<td>CCEE; 134 Town</td>
<td>Provide two additional computer desks and twelve additional chairs in Town 134.</td>
<td>3,991.20</td>
<td>3,991.20</td>
<td></td>
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<tr>
<td>IMSE; Black Engineering basement</td>
<td>Upgraded electrical to establish receptacles on the outside walls by study tables in basement of Black Engr common north hallway.</td>
<td>5,000.00</td>
<td>5,000.00</td>
<td></td>
</tr>
<tr>
<td>AERE; 0638 Howe</td>
<td>Computerized mechanical testing system for structures laboratory and Resource Hub in 0638 Howe Hall</td>
<td>50,132.24</td>
<td>36,872.17</td>
<td></td>
</tr>
<tr>
<td>CBE; 0104 and 0108 Sweeney</td>
<td>Renovation of two rooms into one for an undergraduate computer lab and meeting area, new computers, wiring and furniture in 0104/0108 Sweeney Hall.</td>
<td>133,400.00</td>
<td>86,200.00</td>
<td></td>
</tr>
<tr>
<td>AERE; 0638 and 0257 Howe</td>
<td>Upgrade structures lab to merge facilities for Aerospace Structures (Aer E 322) and EM structures (EM327).</td>
<td>150,000.00</td>
<td>150,000.00</td>
<td></td>
</tr>
<tr>
<td>ME; 1233 and 1360 Hoover</td>
<td>Update and add electrical wiring in 1233 and 1360 Hoover to create student computer labs.</td>
<td>7,000.00</td>
<td>7,000.00</td>
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<tr>
<td>ME; 1360 Hoover</td>
<td>Add 22 computer stools in 1360 Hoover to accommodate more students in the student computer lab area.</td>
<td>8,723.00</td>
<td>8,723.00</td>
<td></td>
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<tr>
<td>AERE; 0642 Howe</td>
<td>Four networked Flight Simulators including flight controls, aircraft instrumentation and visual displays and one Instructor Operating Station in support of coursework for Aer E 301 Flight Experience.</td>
<td>65,000.00</td>
<td>35,000.00</td>
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<tr>
<td>ME; 2095 Black Engineering</td>
<td>Replace 12 table tops in 2095 Black Engineering.</td>
<td>4,444.68</td>
<td>4,444.68</td>
<td></td>
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</tbody>
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**Total:** 348,469.60
APPENDIX A

Request for advance approval of unusual* expenses

[*Categories of unusual expenses are listed in paragraph 2, Section III of the “Guidelines for Appropriate Expenditure of Income from the Student Technology Fee.”]

Department: Mechanical Engineering

Building/room location: Hoover 1233 & Hoover 1348

Description:
Purchase 24 chairs for 1233 Hoover (team assembly room) and 1348 Hoover (storage room being converted to break out room) as more space is needed for students to design and assemble projects. Use of computers is a required aspect of the design process.

Total Project Cost: $8,389.20

Category of unusual expense(s) within the project (see http://www.cio.iastate.edu/committees/cac/policies/expenditures_2011-2012.pdf):

Furniture

Costs associated with these unusual expenses: $8,389.20

Date(s) of proposed expense: May 2013

Justification*:
The large influx of students has made it necessary for us to find ways to accommodate larger sections of ME courses. We are renovating a storage room in order to utilize every possible square foot of space available to us. The chairs and fabric match existing chairs in adjacent space. Again, a greater number of students will be benefit from the renovated space.

*(Please attach PIQ of employee if requesting greater than 50% of base salary support from CAC.)

Requested by: Nate Jensen

College approval: 9-20-13
<table>
<thead>
<tr>
<th>Sold To:</th>
<th>Ship To:</th>
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</thead>
<tbody>
<tr>
<td>Iowa State University</td>
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</tr>
<tr>
<td>Ames</td>
<td>IA</td>
</tr>
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</table>

**Contact:**  
Brandi Laterall

**Phone:**  
515-460-1336

**Fax:**

**Sales:**  
Laurie Bruner

**Number:** 919

3553 109th Street  
Urbandale, IA 50322
515-270-9150  Phone
515-270-9883  Fax
www.triplett.com

**Comments:**
(24) Haworth Improv side chairs with arms, wood back, COM fabric seat, casters. Estimated lead time 6 weeks. Quoted as shipping direct to ISU, no installation included.
Iowa State University - Improv Side Chairs

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<thead>
<tr>
<th>Rec#Mfg</th>
<th>Qty</th>
<th>Part Number</th>
<th>Part Description</th>
<th>Cust$</th>
<th>EXT Cust$</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>HAE</td>
<td>24</td>
<td>M600-2312, 4-Leg Stacker,Arms,Wood</td>
<td>349.55</td>
<td>8389.20</td>
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<td>Back,W/Casters, COM Fabric</td>
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<td>ISU</td>
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<td>(2373-302) GRAPHITE GRD A</td>
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<td>2</td>
<td>DTX</td>
<td>18</td>
<td>2373 302 COM Fabric, Designtex, Pattern:Sonic</td>
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<tr>
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<td></td>
<td></td>
<td>Plus, color: Berry, Repeat: 9&quot;V, 6.75&quot;H</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Customer: $8,389.20
Iowa State University - Improv Side Chairs

Totals:
Total Customer: $8,389.20

Pricing does not include applicable sales tax.

By signing below, the customer agrees to the following Terms & Conditions:

1. All orders are non-cancellable or may be subject to manufacturer's minimum restocking charges, along with freight and handling fees as applicable.
2a. A 50% deposit is required at the time of order placement. Deposit may be made by check or credit card.
2b. Payment balance must be made in full at time of delivery.
3. If the deposit was made by credit card, I authorize the balance to be placed on that credit card at time of delivery.
4. I, the customer, have read and reviewed the above proposal. By signing below, I state my acceptance of all sizes, quantities, and finishes applicable to each line item.

An order will not be processed until this form has been signed and returned to Triplett.

Approved By: ___________________________ Date: ______________

Triplett Representative: ______________________ Date: ______________
Request for advance approval of unusual* expenses

[*Categories of unusual expenses are listed in paragraph 2, Section III of the "Guidelines for Appropriate Expenditure of Income from the Student Technology Fee."*

Department: Civil, Construction & Environmental Engineering

Building/room location: Town 194

Description: Provide four additional computer desks and chairs.

Total Project Cost: $2,849.35

Category of unusual expense(s) within the project (see http://www.cio.iastate.edu/committees/cac/policies/expenditures_2011-2012.pdf): 3. Renovations and updates to facilities required for educational technology use.

Costs associated with these unusual expenses: $1,518.51 for desks and $1,330.84 for chairs

Date(s) of proposed expense: Fall 2013

Justification*:
*(Please attach PIQ of employee if requesting greater than 50% of base salary support from CAC.)*

This computer lab and study area is used heavily by students. It is available for general use by all students in the College of Engineering at all times. The additional workstations help to ease pressure on other computer labs due to increasing enrollment.

Requested by: [Signature]

College approval: [Signature] 11-4-13
Request for advance approval of unusual* expenses

[*Categories of unusual expenses are listed in paragraph 2, Section III of the "Guidelines for Appropriate Expenditure of Income from the Student Technology Fee." ]

Department: Civil, Construction & Environmental Engineering

Building/room location: Town 134

Description: Provide two additional computer desks and twelve additional chairs.

Total Project Cost: $3,991.20

Category of unusual expense(s) within the project (see http://www.cio.iastate.edu/committees/cac/policies/expenditures_2011-2012.pdf): 3. Renovations and updates to facilities required for educational technology use.

Costs associated with these unusual expenses: $1,534.08 for desks and $2,457.12 for chairs

Date(s) of proposed expense: Fall 2013

Justification*: *(Please attach PIQ of employee if requesting greater than 50% of base salary support from CAC.)

This computer lab and classroom is used heavily by students. It is reserved for class 26 hours each week; the remainder of time it is available for general use for all students in the College of Engineering. The additional workstations help to ease pressure on computer labs due to increasing enrollment; the additional seating allows group members to work on team projects at one workstation.

Requested by:

College approval: 11-4-13
APPENDIX A

Request for advance approval of unusual* expenses

[*Categories of unusual expenses are listed in paragraph 2, Section III of the “Guidelines for Appropriate Expenditure of Income from the Student Technology Fee.”]

Department: IMSE

Building/room location: Basement of Black Engineering common north hallway

Description: Upgraded electrical to establish receptacles on the outside walls by study tables.

Total Projected Cost: 5000.00

Category of unusual expense(s) within the project (see:


Costs associated with these unusual expenses: FP&M labor and material charges

Date(s) of proposed expense: February and March 2014

Justification*: This common area has become a student study center with students sitting at tables and using laptops. Having electrical outlets in the area allows further use of this space.

*(Please attach PIQ of employee if requesting greater than 50% of base salary support from CAC.)

Requested by: [Signature]

College approval: [Signature] 2-24-14
Electrical Upgrades to Black Engineering Basement Hallway

**Brief description:** We are proposing to add receptacles at the student study tables in the north hallway of the basement floor of Black Engineering Building.

**Building/room location(s):** Basement of Black Engineering. North hallway.

**Cost categories:** Facility upgrade

**Estimated cost:** $5,000

**Justification for the request:** As we squeezed more computers in the computer labs, we evicted several tables that students used for studying and teaming. The tables were placed in the hallway, where they are again being used by students (from IMSE and ME) for studying and teaming. We have checked, and their location is not in violation of the fire code. However, there are no outlets on the south side of the hallway for students to plug in laptops, and therefore cords are often stretched across the hallway. This proposal is to simply install six receptacles along this hallway, to better utilize this space while maintaining a safe environment.
APPENDIX A

Request for advance approval of unusual* expenses

[*Categories of unusual expenses are listed in paragraph 2, Section III of the “Guidelines for Appropriate Expenditure of Income from the Student Technology Fee.”]

Department: Aerospace Engineering

Building/room location: 0638 Howe Hall

Description: Computerized mechanical testing system for structures laboratory and Resource Hub. This system is used to acquire data for the structural testing component of the AerE 321L/AerE 322 class. It is also available for broader use by all students through the new Resource Hub (www.resourcehub.iastate.edu)

Total Project Cost: $50,132.24, of which $36,872.17 is to be charged to EFTF

Category of unusual expense(s) within the project (see http://www.cio.iastate.edu/committees/cac/policies/expenditures_2011-2012.pdf):

Use category #1 (IT resources for all ISU students)
Expenditure Category A,B (Hardware+Software)

Costs associated with these unusual expenses:

Date(s) of proposed expense: AY 2013-2014

Justification*:
"Supportable IT includes devices and software used for the acquisition, processing, and testing of data as long as the use is directly related to student education". This equipment is for data acquisition and is specifically to be used for the AerE 321L/322 lab coursework.

*(Please attach PIQ of employee if requesting greater than 50% of base salary support from CAC.)

Requested by: Stephen D. Holland

College approval: [Signature] 3/1/14
APPENDIX A

Request for advance approval of unusual* expenses
[*Categories of unusual expenses are listed in paragraph 2, Section III of the "Guidelines for Appropriate Expenditure of Income from the Student Technology Fee."]

Department: Chemical & Biological Engineering Department

Building/room location: 0104/0108 Sweeney Hall

Description of total project: Description from Approved Proposal:
We propose to convert a room in the lower level of Sweeney Hall into a state of the art computer laboratory for open student use. This proposal addresses an identified need within the Department of Chemical and Biological Engineering to provide additional computer infrastructure for our students. Existing facilities have been deemed insufficient to accommodate the current ChE student body. This issue has been exacerbated by recent enrollment growth and the addition of computer-intensive coursework within our curriculum, which have displaced students from our existing computer labs.

Total Project Cost: $140,000

Category of unusual expense(s) within the total project (see http://www.cio.iastate.edu/committees/cae/policies/expenditures_2011-2012.pdf):
- Renovations and updates to facilities required for educational technology use.
- Hardware, software, expendable supplies, security and protection

Costs associated with these unusual expenses: renovation of two rooms into one for an undergraduate computer lab and meeting area, new computers, wiring, furniture

Source of support for remaining project costs: Sweeney Hall Renovation Fund (ISU Fdn)

Date(s) of proposed expense: Spring and Summer Session 2014

Justification*: Copy of approved proposal is attached

*(Please attach PIQ of employee if requesting greater than 50% of base salary support from CAC.)

Requested by: Andrew C. Hillier, Wilkinson Professor of Interdisciplinary Engineering and Chair, CBE department

Date: 2/18/14

College approval: Date: 2/24/17
Danielson, Jody G [C B E]

From: Reints, Ellen J [ENG]
Sent: Monday, December 23, 2013 2:33 PM
To: Hillier, Andrew C [C B E]
Cc: Danielson, Jody G [C B E]; Rajala, Sarah [ENG]; Mirka, Gary A [ENG]; Cox, Ronald A [VPEO]; Somani, Arun K [ENG]; Schafbuch, Belinda R [ENG]
Subject: FW: Technology Fee proposal
Attachments: Technology Fee Proposal - 112213 - V2.docx

Andy –

We have now completed our review of the proposals submitted for additional technology fees. On behalf of the Dean’s Office, I am happy to say that your $133,400 proposal to convert a room into a state of the art computer lab for open student use has been approved by Dean Rajala. We will transfer these funds into your 202-02-86 account for your use.

Thank you,

Ellen

CC: S Rajala, G Mirka, R Cox, A Somani, J Danielson, B Schafbuch

Ellen Reints | Academic Fiscal Officer | Iowa State University College of Engineering
101 Marston, Ames, IA 50011-2151 | Voice: 515.294.2337 | Fax: 515.294-9273 | E-mail: ereints@iastate.edu

From: Hillier, Andrew C [C B E]
Sent: Friday, November 22, 2013 2:35 PM
To: Rajala, Sarah [ENG]
Cc: Reints, Ellen J [ENG]
Subject: Technology Fee proposal

Sarah,

As you requested on Tuesday at the Senior Leadership Meeting, I am resubmitting my technology fee proposal. I am submitting only the first of the three that I originally submitted. This proposal, however, is unchanged from the earlier version as this additional computer laboratory that we are planning is my highest departmental priority for additional computing facilities.

Andy

Andrew C. Hillier
Wilkinson Professor and Chair
Department of Chemical and Biological Engineering
2114 Sweeney Hall
Iowa State University
Ames, IA 50011
Technology Fee Proposal(s)

Department of Chemical and Biological Engineering
Andrew C. Hillier, Wilkinson Professor and Chair

Proposal 1: Undergraduate Computing Laboratory

Brief Description: We propose to convert a room in the lower level of Sweeney Hall into a state of the art computer laboratory for open student use. This proposal addresses an identified need within the Department of Chemical and Biological Engineering to provide additional computer infrastructure for our students. Existing facilities have been deemed insufficient to accommodate the current ChE student body. This issue has been exacerbated by recent enrollment growth and the addition of computer-intensive coursework within our curriculum, which have displaced students from our existing computer labs.

Cost Categories: The proposal includes costs in two categories: (3) renovation expenses associated with converting an existing 666 ft² room into student computational space, including interior upgrading and installation of electrical/lighting and furniture necessary for a modern computer lab (FP&M estimate #PR017337 = $94,400); and (1) purchase and installation of computer workstations (24 seats x $1,500/seat + 2 printers x $1,500/printer = $39,000).

Building/Room Locations: Sweeney Hall, Lower Level – Room 0104 (see Figure)

Total Estimated Project Cost: $133,400.

Total Estimated Cost Share: $0.

Justification for the Request: The Department of Chemical and Biological Engineering has seen its undergraduate enrollment double since 2005. This increase in student numbers has put a strain on our educational capabilities, particularly access to the physical resources needed for experiential and computational course activities. Most notably, the availability of computer facilities within the department, particularly those having specialized software related to chemical engineering design and physical property prediction (HYSYS, Aspen, etc.) are a critical need for students in our various chemical engineering courses. Along with the recent enrollment growth, we have increased the computational course requirements in our curriculum. As of 2013, three of our core undergraduate courses have sufficient computational activities that they need be taught within departmental computer labs. This additional lab usage has displaced our students from the computer labs, and left an inadequate number of free workstations in Sweeney available for student work during much of the school day. To address this student need, we propose to take an existing, underutilized room within Sweeney Hall and convert it into an open use computer lab. The location of this proposed computer lab is also convenient for student usage in that it would be placed in the same vicinity as our existing undergraduate lounge and AIChE student office. We anticipate that this would create an inviting and heavily used undergraduate space, which could also be featured on campus tours as an integrated student space.
APPENDIX A

Request for advance approval of unusual* expenses

Department: Aerospace Engineering

Building/room location: 0638 Howe Hall and 0257 Howe Hall

Description: Upgrade structures laboratory to merge facilities for Aerospace Structures (EM321L) and EM structures (EM327) labs. The upgraded laboratory will double throughput while simultaneously increasing students' hands-on practice time. This will be achieved by having multiple sets of equipment so students can perform experiments in parallel rather than in series.

Total Projected Cost: $150,000

Category of unusual expense(s) within the project (see http://www.cio.iastate.edu/committees/cac/policies/expenditures_2011-2012.pdf): A3 renovations & updates

Costs associated with these unusual expenses:

$75k for computer-driven mechanical testing machines.  
$25k for computers  
$50k for sensors and experimental apparatus to support 5 simultaneous lab groups.

Date(s) of proposed expense: Summer 2014

Justification*: Rapidly rising enrollments have caused both Aerospace Structures (AerE 321L) and EM structures (EM327) to outgrow their existing laboratory facilities. This proposal would support merging the two facilities into one larger facility that can support much higher student throughput by having multiple sets of equipment, so experiments can be performed in parallel, rather than in series. This will impact roughly 150-200 students per year in AerE 321L and 250+ students (Civil, Construction, and Agricultural) per year in EM327.

The major equipment required for these courses are mechanical testing machines. We have two high-load units already (one in place and one on order -- the cost share). These high-load units ($50k ea) are required for testing large metal and composite specimens to failure. In addition we will purchase six lower capacity machines to support five parallel lab groups ($75k). Our ABET examiner noted that the instrumentation in the lab is surprisingly meager given the number of students supported.

$25k in computers will equip each lab station in two sub-rooms, so as to automate data acquisition and connect physical experiments to CAD and finite-element models. In addition multiple sets of upgraded experimental apparatus ($50k) will be required for most of the experiments in both EM327 and AerE 321L. The upgraded equipment will include specific apparatus as well as general purpose digital computer-linked sensors such as accelerometers, load cells, and laser extensometers that are suitable for more open-ended creative laboratory experiences.

Requested by: Joseph A. Schaefer, Ph.D., Senior Lecturer Aerospace Engineering

College approval: [Signature] 4-28-14
APPENDIX A

Request for advance approval of unusual* expenses

[*Categories of unusual expenses are listed in paragraph 2, Section III of the "Guidelines for Appropriate Expenditure of Income from the Student Technology Fee." ]

Department: Mechanical Engineering

Building/room location: Hoover 1233 & Hoover 1360

Description: Update and add electrical wiring in 1233 and 1360 Hoover to create student computer labs.

Total Projected Cost: $7,000

Category of unusual expense(s) within the project (see http://www.cio.iastate.edu/committees/cac/policies/expenditures_2011-2012.pdf):

Other Services

Costs associated with these unusual expenses: $7,000

Date(s) of proposed expense: June 2014

Justification*: 1233 Hoover is being converted to a student computer lab to accommodate the increased number of students in mechanical engineering. 1360 Hoover is being converted into a flexible computer lab/classroom/teaming area to accommodate the increased number of students in mechanical engineering. The electrical wiring is needed to accommodate the addition of 23 computers in 1233 Hoover and 12 computers in 1360 Hoover. Space is a significant issue for the department and converting these spaces into student computer labs will increase the access for students.

*(Please attach PIQ of employee if requesting greater than 50% of base salary support from CAC.)

Requested by: Nate Jensen

College approval: 5-22-14
Hi Mary. I got quotes today for the electrical wiring of 1360 and 1233 Hoover. Can you put together the request for unusual expenditures that goes to the college for this (for using EFTF funds)?

1360 Hoover = $2800
1233 Hoover = $4200

The justification is that we are turning 1233 Hoover into a student computer lab to accommodate the increased number of students in ME. We are converting 1360 Hoover into a flexible computer lab/classroom/teaming area to accommodate the increased number of students in ME. The new electrical wiring is needed for the addition of 23 computers in 1233 and 12 computers in 1360.

Let me know if you have any questions.

Thanks!
Nate

--
Nate Jensen
Systems Support Specialist
Department of Mechanical Engineering
Iowa State University, 2079 Black Engineering Bldg
Ames, IA 50011, 515-294-9415

From: <Latterell>, "Brandi [FPM]" <blattere@iastate.edu>
Date: Wednesday, May 14, 2014 at 3:38 PM
To: Nate Jensen <njensen@mail.iastate.edu>
Cc: "Bremer, Sandy [M E]" <sbremer@mail.iastate.edu>
Subject: Hoover: electrical

Nate, I received pricing on the electrical, which is materials and labor. We are figuring the break down to be (approx.) $2800 for 1360 and $4200 for 1233.

These are T&M prices so the actual costs typically come in under. Does this help in your figuring for the funding?

We are waiting on ship dates for materials but Don plans to have the work in both rooms complete by June 27th.

Thanks.

Brandi Latterell
Project & Construction Manager, Design Services

IOWA STATE UNIVERSITY
Facilities Planning & Management
128 General Services Building, Ames, Iowa 50011-4025
Telephone: 515-460-1336
blattere@iastate.edu
www.fpm.iastate.edu

Making Commitments, Keeping Commitments
APPENDIX A

Request for advance approval of unusual* expenses

[*Categories of unusual expenses are listed in paragraph 2, Section III of the “Guidelines for Appropriate Expenditure of Income from the Student Technology Fee.”]

Department: Mechanical Engineering

Building/room location: Hoover 1360

Description: Add 22 computer stools in 1360 Hoover to accommodate more students in the student computer lab area.

Total Projected Cost: $8,723

Category of unusual expense(s) within the project (see http://www.cio.iastate.edu/committees/cac/policies/expenditures_2011-2012.pdf):

Furniture

Costs associated with these unusual expenses: $8,723

Date(s) of proposed expense: June 2014

Justification*: 1360 Hoover is being converted into a flexible computer lab/classroom/teaming area to accommodate the increased number of students in mechanical engineering. The computer stools are needed for students to be able to comfortably use the computers in this renovated area. Space is a significant issue for the department and converting 1360 Hoover into a multi-purpose area that includes additional space for more students to use a computer lab will increase the access for students.

*(Please attach PIQ of employee if requesting greater than 50% of base salary support from CAC.)

Requested by:  Nate Jensen

College approval:  Ellen  

[Signature and Date]
APPENDIX A

Request for advance approval of unusual* expenses

**Department:** Department of Aerospace Engineering

**Building/room location:** Howe Hall, Rm 0642

**Description:** Four (4) networked Flight Simulators including flight controls, aircraft instrumentation and visual displays and one (1) Instructor Operating Station in support of coursework for Aer E 301 Flight Experience.

**Total Project Cost:** Approximately $65,000 of which $35,000 will be funded with EFTF funds.

**Category of unusual expense(s) within the project:** Consulting CAC for the purchase of major educational technology equipment (greater than $25K per system.)

**Costs associated with these unusual expenses:** Approximately $65,000 of which $35,000 will be funded with EFTF funds. Hardware, software and networking will be purchased as a system.

**Date(s) of proposed expense:** Approximately July 1, 2014, delivery not later than Aug 1, 2014 in support of Fall 2014 class schedule

**Justification:** The department has decided to move away from the previous approach to completing this course where each student got a ride in a light airplane. The desire is to give each Aero E student a more enriching, enlightening and educational experience by letting them fly a variety of aircraft in a high fidelity simulator where they can experience flight controls, avionics, instrumentation, communication and aviation environments.

**Aero E 301. Flight Experience Syllabus**

**Desired Learning Objective:**
Flight Experience - Student will be exposed to a variety of flight experiences including:
- Ground operations
- Take-off and departure
- Enroute operations
  - Basic aircraft handling and performance
  - Navigation and communication
- Recovery and landing
- Aircraft systems evaluation and tracking

**Course Summary:**
1 hour course introduction in Howe Hall auditorium
1 hour in classroom preparation for final project
Approximately 7 hours of required simulator time
Students enrolled in Aero E 301 will be authorized an additional 2 hours of sim time for practice
Final project is a team project: satisfactory-fail
Course Content
Block 1 (1 hour in auditorium)
Course Introduction

Block 2 (2 hours in Flight Simulator)
Block 2 exercises will be completed individually
Exercises 1-8 in Microsoft Flight Sim (MS-FSX)

Block 3 (4 hours in Flight Simulator)
Block 3 exercises will be completed in 2-person teams
  2 each, Beginner Missions
  2 each, Intermediate Missions

Block 4 (1 hour in simulator lab briefing room)
Final project teams (4-person) will be assigned by instructor
  Block 4 exercises will be completed as a team
  Final Project Prep
    Assigning responsibilities
    Practice and Dry Run

Block 5 (1 hour in X-Plane Flight Simulator)
Block 5 Final will be completed as a team
  Final Project – Create, Brief, Execute and Debrief a Flight Test Mission

Flight Simulation Lab
Flight sim lab is located in Howe Hall, Rm 0642 (basement)
4 Simulators are available for completion of coursework
Each simulator station has both MS-FSX and X-Plane software loaded
Schedule simulator time in 2 hour blocks using scheduling service

Requested by:
Robert Martin, Col (ret) US Air Force
ISU Department of Aerospace Engineering, Flight Simulator Lab
Program Director
Office: (515) 294-6597
Cell: (641) 757-1669

College approval: [Signature] 6-12-14
APPENDIX A

Request for advance approval of unusual* expenses

[*Categories of unusual expenses are listed in paragraph 2, Section III of the “Guidelines for Appropriate Expenditure of Income from the Student Technology Fee.”]

Department: Mechanical Engineering

Building/room location: Black 2095

Description: Replace 12 table tops in 2095 Black Engineering.

Total Projected Cost: $4,444.68 plus shipping (estimated ~$300)

Category of unusual expense(s) within the project (see

Furniture

Costs associated with these unusual expenses: $4,444.68 plus shipping

Date(s) of proposed expense: July 2014

Justification*: 2095 Black Engineering is used for several ME lab courses (e.g., 418, 421, 411). The tables in this classroom are falling apart and the laminate is coming off the table tops. The labs cannot be taught on the current table tops as they are ragged and torn. To save money, the Department of Mechanical Engineering will reuse the table legs and have student technicians install new table tops. The quote that Nate Jensen received was $370.39 per table top. Since 12 table tops need to be replace, the total would be $4,444.68 (plus shipping charges ~$300).

*(Please attach PIQ of employee if requesting greater than 50% of base salary support from CAC.)

Requested by: ___________ Nate Jensen ________________________________

College approval: ___________________________ 6-20-14
Hi Deborah,

We estimate shipping to be $300.00 for purchase order Nate Jensen 61914.

Rob

---

From: daschro@iastate.edu

Sent: Thursday, June 19, 2014 11:23 AM

Message
Please advise if freight charges will be over $500 as this will be over to my credit card limit. Thank you.

From
Deborah Schroeder (daschro@iastate.edu)
Iowa State University
Mechanical Engineering Dept
1043 Black Eng Bldg
Ames, IA 50011
Order Confirmation

630-600-3600
630-834-9427 (fax)
chi.sales@mcmaster.com

Ship to
Iowa State University
Mechanical Engineering
1043 Black Engineering Bldg
Ames IA 50011

Attention Nate Jensen 1043 Black Eng Bldg

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Notes
Your order is subject only to our terms and conditions, available at www.mcmaster.com.

Merchandise $4,444.68
Applicable shipping charges will be added.

McMaster-Carr Supply Company