Appendix D 7.1

Information Systems Administrator Advisory Board Meeting
September 13, 2012
2:00 pm
A-230

Members Present: Tom Hopkins Ty Cook Bill Allred Sandra Partain Keith O’toose Laura Goadrich Jennifer Parish
Meeting began at 2:00 pm. Tom Hopkins opened the meeting and everyone introduced themselves. Tom began with explaining what the Advisory Board is all about. We have one big advisory board meeting in Spring and the Subcommittee meetings are held in the Fall. Division Highlights The Committee on National Security Systems This year we were awarded two additional certifications for our program. We now hold credentials on NSTISSI 4011 National Training Standard for INFOSEC, CNSS 4012 National Information Assurance Training Standard for Senior System Managers, CNSS 4013 National Information Assurance Training Standard for System Administrators, CNSS 4014 National Information Assurance Training Standard for Information Systems Security Officers. As of August 15 we have submitted the paperwork to request certification in the last two areas which are NSTISSI 4015 National Training Standard for System Certifiers and CNSS 4016 National Information Assurance Training Standard for Risk Analysts. We received the CAE2Y in June 2011. The CAE2Y (Center of Academic Excellence for the Two Year University) is college wide. This past year BPCC was awarded CAE2Y and we are the only CAE2Y school in Louisiana and also one of only about 24 in the nation. E-reader Grant The division has been awarded a $60,000 grant to test e-readers in the classroom. With this grant money we will be getting 50 iPAD and 50 Galaxy Tablets to test e-books in the classroom. After the study is over we will look to use these devices in our newly developed mobile apps course.

NSF/ATE Grant We are currently working on the paperwork to submit to the National Science Foundation to become a Regional ATE center. If awarded this grant the funds will be used to enhance/develop a robust dual enrollment program to help expose middle and high school students in the areas of STEM. STEM is used to get high school students more interested in this. ATMAE We received ATMAE Accreditation in Spring 2011. The board reviewed and voted in Fall 2011.
The new report will be due in September 2013 and the board will vote in November 2013. It is almost time for us to submit the updates for ATMAE. As part of this endeavor they asked that we create a survey to help us track student preparation. Please take some time to complete this survey for students that have served as interns. It can be found at: https://docs.google.com/spreadsheet/viewform?formkey=dDI3U1g1ZndXMEF2bm1Sek1LWDJlcIE6MQ#gid=0

Curriculum Review
Short Term Goals
The current short term goals are as follows: Have industry present their real-life experiences to the students in their coursework, Develop internship opportunities for System Administration students and Create promotional materials that relate the degree program to occupations in industry.

Long Term Goals
The current short term goals are as follows: Increase enrollment in the program through student recruitment in area high schools, Develop more certification opportunities, Increase contact with high school through dual enrollment programs and Develop laboratories that will combine tasks across disciplines (networking, network security, etc)

Internships
Bill Allred asked if there are internship opportunities here at BPCC for our students. Laura mentioned that Adam Hofslund was hired in Computer Services. Sandra Partain has been talking with representatives at Willis Knighton and has thrown our name out there as a possible internship. This would give our students in our program an hands on opportunity.

Program Outcomes & Curriculum
Tom went over the Program Outcomes and explained how each of them are used (see the handout). Next, went over the curriculum for this degree. Are there any updates or changes that need to be made to enhance the program? Changes to the degree plan, Certificate changes or updates (which certifications would you like future employees to hold) or Languages (which programming languages will be serve your industry). Ty Cook gave out a handout with his suggested changes for the program. Tom concluded the meeting with telling everyone that if they had any ideas or suggestions to email him. There were two items left for later email discussion. 1. The advisors wanted a chance to look over the curriculum in more detail before offering any suggestions on changes. 2. We need to look over Ty Cook’s recommendations and see what changes need to be made and respond to those items. Tom Hopkins adjourned the meeting at 3:30 pm
Agenda
AAS - Information Systems Administrator Subcommittee
9/13/2012
2:00pm-3:00pm
2-2:05
Introductions
2:05-2:10
Division Highlights
The Committee on National Security Systems
This year we were awarded two additional certifications for our program. We now hold credentials on:
• NSTISSI 4011 National Training Standard for INFOSEC
• CNSS 4012 National Information Assurance Training Standard for Senior System Managers
• CNSS 4013 National Information Assurance Training Standard for System Administrators
• CNSS 4014 National Information Assurance Training Standard for Information Systems Security Officers
As of August 15 we have submitted the paperwork to request certification in the last two areas:
• NSTISSI 4015 National Training Standard for System Certifiers
• CNSS 4016 National Information Assurance Training Standard for Risk Analysts.
Center of Academic Excellence for the Two Year University.
This past year BPCC was awarded CAE2Y. We are the only CAE2Y school in Louisiana and one of only about 24 in the nation.
E-Reader Grant
The division has been awarded a $60,000 grant to test e-readers in the classroom. With this grand money we will be getting 50 iPAD and 50 Galaxy Tablets to test e-books in the class. After the study is over we look to use these devices in our newly developed mobile apps course.
NSF/ATE
We are currently working on the paper work to submit to the National Science Foundation to become a Regional ATE center. If awarded this grant the funds will be used to enhance/develop a robust dual enrollment program to help expose middle and high school students in the areas of STEM. (We would love to have you be part of the industry support for this grant. Please let us know and we can provide more details)
2:10-2:20
ATAME
It is almost time for us to submit the updates for ATAME. As part of this endeavor they asked that we create a survey to help us track student preparation. Please take some time to complete this survey for students that have served as interns. It can be found at: https://docs.google.com/spreadsheet/viewform?formkey=dDI3Ulg1ZndXMEF2bm1SekJ1LWDJlclE6MQ#gid=0
The other elements we must review for ATAME are course outcomes from the year.
2:20-2:50
Curriculum Review
1. Review Short & Long Term Goals.
2. Review Learning Outcomes
3. Review current curriculum.
Are there updates or changes that need to be made to enhance the program.
• Changes to degree plan addition/deletion/ modification
• Certificate changes or updates (which certifications would you like future employees to hold)
• Languages (which programming languages will be serve your industry)
Internships
Each of our programs cap with an internship to help students gain real life experience. If you business would like to help with this process please let us know. Also we are always looking for new businesses to partner with for internships. If you have suggestions please let us know.
2:50-3:00
Wrap up and Closing remarks / Comments Suggestions
Attachments
Pg 5 - Advisory Committee Charter
Pg 6 - Long and Short Term Goals
Pg 7-8 – Learning Outcomes and Current Curriculum
Pg 9 - Ty Cook’s Recommendations
Advisory Committee Charter
Charter for Cyber Information Technology

I. Purposes
The Committee is created for the purpose of working with the Cyber Information Technology Division and shall limit its activities to advising on matters that directly concern the instructional program. The specific purposes of the Committee may include the following responsibilities:
--assist in placing students at employment sites
--determine necessary entry-level skills, attitude and knowledge competencies as well as performance levels for target occupations in the community
--facilitate cooperation and communication between the program and the community
--assist in program evaluation and improvement
--assist the program in setting priorities, including participating in ongoing planning activities of the program

II. Committee Charge
The advisory committee is expected to offer recommendations for instructional programs and to provide information relevant to policy about the instructional program to the administration and instructors.

III. Membership
Members serve voluntarily and will constitute a cross-section of the community including BPCC faculty, staff and students, local industry, secondary and university representatives. Membership will be reaffirmed at the annual spring meeting.

IV. Procedural Rules
Meetings: The committee will meet at least one time a year. Written notices of upcoming meetings will be mailed to members at least ten days before a meeting.
Subcommittees: A subcommittee will be created for each of the degrees and certificates in the Cyber Information Technology Division. Membership to the subcommittee will consist of a volunteer subgroup of a minimum of three members from the full advisory board. These subcommittees will meet as needed independent of the full advisory board to make decisions about program development.
Minutes: Minutes of each meeting will be posted at http://www.bpcc.edu/cit.
AAS in Information Systems Administration Specialist – Long and Short Term Goals

These are the goals developed for the Information Systems Administration program by the faculty in the November 2011 faculty meeting and confirmed by the advisory board at the end of the month via email:

Short-term Goals
1. Have industry present their real-life experiences to the students in their coursework *
2. Develop internship opportunities for Systems Administration students
3. Create promotional materials that relate the degree program to occupations in industry

Long-term Goals
1. Increase enrollment in the program through student recruitment in area high schools *
2. Develop more certification opportunities
3. Increase contact with high school through dual enrollment programs
4. Develop laboratories that will combine tasks across disciplines (networking, network security, etc)

Possible Suggested Changes:
Short Term Goals:
Replace #1 with: Encourage student participation in competitions and organizations to network with others.

Long-Term Goals:
Replace #1 with: Keep curriculum relevant to industry needs by interaction with employers and the advisory board.
Associate of Applied Science in Information Systems Administration Specialist
Learning Outcomes:
Recipients of the Associate of Applied Science in Information Systems Administration Specialist will have demonstrated:
1. clarity in verbal and written communication to accurately convey technical information and to critically read and interpret technical literature;
2. the ability to critically analyze and solve real world client and server system issues;
3. working knowledge in multiple operating system environments enabling graduates to critically analyze and react to new developments in their field;
4. the utilization of mathematics to collect, analyze and interpret technical data collected through security investigation and experimentation; and
5. an application of networking and systems integration to gain hands-on experience

Required courses for Associate of Applied Science in Information Systems Administration Specialist:
FRESHMAN YEAR
First Semester
Hours
CIS 105: Computer Concepts 3

CIT 101: Network Essentials 3

ENGL 101: Composition & Rhetoric I 3

MATH 101 or MATH 102: Applied Algebra for College Students
College Algebra 3
CIS 102: Problem Solving and Programming Techniques 3

Second Semester
Hours
BADM 215: Business Law 3
PHSC 105:  
Elemental Physics  
3

CIT 115:  
Network Defense  
3

CIT 170:  
Microsoft Windows Server  
3

CIT 130:  
Web Design I  
3  
15

SOPHOMORE YEAR
Page 8

Third Semester
Hours
CIS 209: Advanced MS Access
3

CIT 172: Linux Server
3

CIT 279: Information Assurance
3
Programming Elective *
3
Humanities Elective***
3
15

Fourth Semester
Hours
CIT 282: IT Project Management
3

CIT 291: Systems Administration Specialist Internship
3
SPCH 110: Principles of Speech
3

CIT Elective **
3 or 4
Behavioral/Social Science Elective****
3
15 or 16
Total credit hours
60 or 61
* Programming Electives: CIS 113, CIT 150, CIT 160, CIT 209
** CIT Electives: CIT 110, CIT 112, CIT 121
***Humanities electives: ENGL 201, 202, 255, or 256; FREN 101, 102 or 201; HIST 101, 102 103 104 201 202 or 203; HMAN 201****, 202**** or 203****; RI GN 201 or

Oil & Gas Production Technology Advisory Committee Meeting Minutes
September 11, 2012
9 a.m. in A-230

Attendees:
Sandra Partain
Rocky Dupichan
Laura Goodrich
Ray Lasseigne
Wes James
Gina Dutcher
Patti Trudell
Jeffrey Holliday
Ragan Dickens
Darlene Williams
Stan Wilkins
Gregory L. Costes
Carrie Salinas
Keith Evans
Larry N. Cooper
Jim Tilley

Welcome
At 9:05 a.m., Laura Goodrich, Dean of Technology, Engineering, & Mathematics, welcomed everyone to the meeting. She began by introducing herself and Carrie Salinas, as both would be leading the meeting in Linda Sonnier’s absence. Roundtable introductions followed.

Leadership for the Committee
Carrie Salinas informed the group that new advisory board leaders would be needed for the 2012-2013 academic year. Ray Lasseigne recommended that Ragan Dickens of LOGA be given the honor. To which Mr. Dickens graciously accepted.

Progress Report on the AAS
A Progress Report on the AAS in Oil and Gas Production Technology was presented by Carrie Salinas. Topics covered included enrollment, learning outcomes, current courses offered, graduates, and internships. Specific information regarding these topics is available at the end of the minutes. Overall, most graduates of the program are doing well; they are either working in the field or have moved on to 4-year programs. Laura Goodrich discussed the programs learning outcomes in more detail. The program was approved for accreditation in March by ATMAE. As part of accreditation, the program is required to be reviewed once a year. Our Division reviews programs each semester, mainly through learning outcomes. She explained the role of the learning outcomes and how they are measured to calculate the success of a class. During discussion, it was explained that there are improvements to be made to
foundational classes. It is the desire of the OGPT faculty to incorporate more hands-on activities this semester. If the committee members have any suggestions they are encouraged to contact Laura Goadrich, Linda Sonnier, or any of the faculty members.

The average success of students in the program is 86% with an overall success rate of 80%. The numbers for OGPT 101 are lower because it is an introductory, or overview, course for the program. Many students that enroll in the course find that they either do not enjoy it or realize the workload is too great, thus they drop the course. But those students that do well in OGPT 101 do well in the other program courses. Carrie Salinas described OGPT 101 as the “weed-out” course for the program.

Gina Dutcher asked if the program had been compared to other programs in our institution as well as others. Laura Goadrich explained that there is a trend in new programs. Students may enter a program not fully knowing what it consists of or what will be expected of them. Larry Cooper also mentioned that in several of the introductory courses he has taught there have been individuals simply taking the class for informational purposes.

Carrie Salinas described the program curriculum, explaining that classes in the second semester build upon the introductory classes of the first semester. A speech course has replaced the prior Business course requirement. A benefit of the speech class is the development of soft skills for the students. The committee had previously requested the speech class.

Internships are offered twice a year, in the Spring and Summer semesters. At other times, OGPT 260: Computer Applications, is offered as a substitute. The program is still experiencing problems placing students in internships, thus a class is offered to provide professional development, such as industry speakers, expositions, etc. New internship opportunities are always being sought. There have been no problems with any of the students placed so far. Ray Lasseigne commented that an additional class strictly offering observation opportunities may be a good alternative for internships.

**SOGO**

The Student Oil & Gas Organization has recently chosen a new Vice President, Wes James. Elections for the position of President will close soon. Wes spoke to the committee about his expectations for this academic year. The organization is small but growing and needs assistance from local companies to ensure that members are informed of all industry opportunities. The goals of the organization are networking, leadership, and professional development. Meetings are planned for once a month, but with a mix of traditional and non-traditional students, finding a convenient time for all to attend has been challenging. Greg Coates commented that he would be willing to offer meeting space for SOGO, and he was sure any of the industry partners would do the same. SOGO will also be holding fundraising events and would like to incorporate a speaker series that would be beneficial not only to members but to industry partners. Membership in SOGO is available to all students enrolled in the OGPT program.

**Equipment**

Rocky Duplichan updated the committee on the equipment currently available. Included are: LabVolt Trainer, Simtronics Software, DrillBench Software, hydraulics panel, pneumatics simulator, and pump control panel. Rocky has plans to reorganize the equipment in J119 so that everything may be utilized better.
Grants and Gifts

Laura took a moment to thank our industry partners for their financial and equipment support. Industry support of the program has provided instruction materials, faculty and adjunct salaries, student events, and training for faculty. Carl Perkins and Rapid Response grants have also provided equipment, training, and salaries.

WINLA

Patti Trudell provided the committee with an update on the WINLA energy grant, including a brief history and description of how funding is raised. Workforce Innovation in Northwest Louisiana targets unemployed and underemployed adults to create workforce partnerships.

Two areas upon which the program focuses are Energy Services and Energy Conservation. Both are short-term programs offering certificates. An academy aspect has been incorporated to promote basic skills before entering introductory classes. Additional information is available at the end of the minutes. The program information has been sent to the Board of Regents for approval and talks are in the works with NSU to match their program.

Faculty and administration are working toward gaining Mechatronics certifications, and hope to include the credential within the year. Alliances with PTEC and NAPTA have been established.

Adjourn

No further discussion or questions were presented by the committee. Carrie Salinas thanked everyone for attending and their continued support. The meeting adjourned at 10 a.m.
Advisory Committee Agenda
Oil and Gas Production Technology and Energy Programs
September 11, 2012

1. Welcome
   Laura Goadrich

2. Leadership for the Committee
   Carrie Salinas & Encana

3. Progress Report on the AAS – Oil and Gas Production Technology
   a. Enrollment
   Carrie Salinas
   b. Learning Outcomes
   c. Courses Offered and Instruction
   d. Graduates and Placement
   e. Internship Program

4. Adapting to Changing Local Opportunities
   Ragan Dickens, LOGA

5. SOGO
   Carrie Salinas

6. Accreditation – ATMAE
   Laura Goadrich

7. Equipment Rocky Duplichan
   Linda Sonnier

8. Grants and Gifts
   Laura Goadrich

9. Facilities
   Linda Sonnier and Lisa Abney, NSU

10. New Programs
    a. Certificate of Technical Studies – Energy Services
    b. Proposed Energy Management Bachelor’s Degree at NSU

11. New Industry Recognized Credentials
    a. Siemens Mechatronics Level One
    b. NAPTA Endorsed Process Technology Program (PTEC)

12. Program Leadership Discussion
    Laura Goadrich

13. Other Long and Short Term Goals
    Laura Goadrich

14. Thanks and Adjourn
    Carrie Salinas
Introduction

Faculty and Adjunct

BCC Department Personnel

Student SOGO Leader(s)

Student Representative(s)

Operators/Engineers/Consultants

Industry Members and Support
STATUS OF THE OGPT PROGRAM

Current Enrollment
Fall, 2012 136
Program Graduates
Fall, 2011 6
Spring, 2012 14
Summer, 2012 5
Fall, 2012 ~32

Graduate Opportunities
- 4-year transfer opportunities
- Full-time employment
- Inquires from potential employers
STATUS OF THE OGPT PROGRAM

Current Learning Outcomes

Recipients of an Associate of Applied Science in Oil and Gas Production Technology will be able to:

1. Relate the processes which lead to the geological origins of oil and gas and the process of its accumulation within the earth’s crust;
2. Explain the procedures and evaluate the options for fossil fuel exploration, drilling, well completion, production, recovery, and processing;
3. Discuss all subject matter using industry terminology and prepare written summaries of industry issues;
4. Demonstrate competent operational ability for basic electrical equipment, hydraulics, pneumatics, and fluid dynamics equipment; pumps and compressors; oil and gas instrumentation equipment; and oil and gas processing equipment;
5. Understand well analysis processes and procedures, the well decision process, the economics of production and recovery; and
6. Perform work functions within the regulatory and safety systems established for the industry.
# OIL AND GAS PRODUCTION TECHNOLOGY PROGRAM INFORMATION

## FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MATH 129: Applied Technical Math</td>
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<tr>
<td>PHSC 111: Physical Geology</td>
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<tr>
<td>TEED 101: Basic Electricity</td>
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<tr>
<td>ISA F 109: Basic Field Safety Orientation (Safe Land Certification)</td>
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<tr>
<td>OGPT 101: Introduction to the Exploration and Production of Oil and Gas</td>
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<td>OGPT 103: Drilling Complex Wells</td>
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<td>OGPT 131: Well Completions &amp; Workovers</td>
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<td>MATH 102: College Algebra</td>
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<td>ENGL 101: Composition and Rhetoric I</td>
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<td>SPCH 110: Oral Communications</td>
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<tr>
<td>OGPT 270: Cooperative Education (16 weeks)</td>
<td>3 OR</td>
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<tr>
<td>OGPT 280: Internship (8 weeks)</td>
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# OIL AND GAS PRODUCTION TECHNOLOGY PROGRAM INFORMATION

## SOPHMORE YEAR

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<tbody>
<tr>
<td>OGPT 203: Oil and Gas Instrumentation &amp; Lab</td>
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<td>TEED 245: Pumps &amp; Compressors with Lab</td>
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<tr>
<td>OGPT 150: Regulatory Issues for the Oil and Gas Industry</td>
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<td>OGPT 207: Production and Recovery Part I</td>
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<tr>
<td>Humanities Elective</td>
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<td><strong>Total Hours</strong></td>
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<td>ISAF 209: Regulatory Issues and Hazwoper 40 Safety Certification</td>
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<td>OGPT 217: Production and Recovery Part II</td>
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<td>OGPT 221: Natural Gas Processing and Lab</td>
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<td>TEED 153: Hydraulics/Fluid Dynamics with Lab</td>
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<tr>
<td>POSC 202: State and Local Government</td>
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<td><strong>Total Hours</strong></td>
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**Total credit hours**

63
OGPT INTERNSHIPS

Requirements to host internships:
* 8 weeks – 16 weeks
* Variety of experiences
* Observe, help, and perform tasks

How students qualify for internships:
* Complete 30 credit hours of degree program
* Complete Safe Land/HAZWOPER Certification
* Have appropriate GPA
* Be mature and responsible enough to handle field work
* Agree to the terms of the internship
* Complete all necessary documents
* Interview and be selected by the host company.

Companies are needed to host internships
OGPT INTERNSHIPS

Typical Internship Providers
* Operating Companies
* Various Consultants
* Sales, Service Companies
* BPCC

Student Internship experiences:
* Research
* Office personnel
* Field personnel, including roustabout, equipment maintenance, lease operations
* Other entry level positions
* Misc. training
* Leads to full-time employment

Companies are needed to host internships!
Associate of Applied Science in Oil and Gas Production Technology

Program Mission:
The Associate of Applied Science in Oil and Gas Technology provides the graduate with the knowledge and applied technical skills needed to compete for Production Technologist positions within the energy sector.

Learning Outcomes:
Recipients of an Associate of Applied Science in Oil and Gas Production Technology will be able to:

A. relate the processes which lead to the geological origins of oil and gas and the process of its accumulation within the earth’s crust;
B. explain the procedures and evaluate the options for fossil fuel exploration, drilling, well completion, production, recovery, and processing;
C. discuss all subject matter using industry terminology and prepare written summaries of industry issues;
D. demonstrate competent operational ability for basic electrical equipment, hydraulics, pneumatics, and fluid dynamics equipment; pumps and compressors; oil and gas instrumentation equipment; and oil and gas processing equipment;
E. understand well analysis processes and procedures, the well decision process, the economics of production and recovery; and
F. perform work functions within the regulatory and safety systems established for the industry.

Specific Degree Information:
The Associate of Applied Science in Oil and Gas Production Technology is a 63-semester hour curriculum to prepare students for field operations careers in the oil and gas industry. The program is an industry-driven response to the oil and gas resource discoveries in Northwest Louisiana since 2008. A plan of study, specifically designed to prepare students with both knowledge and laboratory/field experiences, will provide graduates with the foundation for a successful career in the oil and gas industry.

Required courses for the Associate of Applied Science in Oil and Gas Production Technology:
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<td>Internship - Oil and Gas Technology/Technician (8 weeks)</td>
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<th><strong>SOPHOMORE YEAR</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td>OGPT 203:</td>
<td>4</td>
</tr>
<tr>
<td>Oil and Gas Instrumentation and Lab</td>
<td></td>
</tr>
<tr>
<td>TEED 245:</td>
<td>2</td>
</tr>
<tr>
<td>Pumps and Compressors with Lab</td>
<td></td>
</tr>
<tr>
<td>OGPT 150:</td>
<td>2</td>
</tr>
<tr>
<td>Regulatory Issues for the Oil and Gas Industry</td>
<td></td>
</tr>
<tr>
<td>OGPT 207:</td>
<td>3</td>
</tr>
<tr>
<td>Production and Recovery I</td>
<td>Humanities Elective</td>
</tr>
<tr>
<td></td>
<td>14</td>
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<table>
<thead>
<tr>
<th><strong>Second Semester</strong></th>
<th><strong>Hours</strong></th>
</tr>
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<tbody>
<tr>
<td>ISAF 209:</td>
<td>3</td>
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<tr>
<td>Safety Regulations and Hazwoper 40 Safety Certification</td>
<td></td>
</tr>
<tr>
<td>OGPT 217:</td>
<td>3</td>
</tr>
<tr>
<td>Production and Recovery II</td>
<td></td>
</tr>
<tr>
<td>OGPT 221:</td>
<td>4</td>
</tr>
<tr>
<td>Natural Gas Processing and Lab</td>
<td></td>
</tr>
<tr>
<td>TEED 153:</td>
<td>3</td>
</tr>
<tr>
<td>Hydraulics/Fluid Dynamics with Lab</td>
<td></td>
</tr>
</tbody>
</table>
Total credit hours 63

Students entering the program must qualify at minimum for placement in MATH 099 and ENGL 099. Students required by academic policy to remediate in READ 099 and/or EDUC 099 will not be allowed to pursue any OGPT, ISAF, or TEED course until these requirements are completed. Students required by academic policy to remediate in MATH 099 will not be allowed to pursue any required TEED course until these requirements are complete. All program students must successfully complete a mathematics course each semester until mathematics requirements are complete. Computer Literacy will be assessed in OGPT 101. Oral communication, Critical Thinking, and Library Skills requirements will be satisfied by completing OGPT 217. Note that these substitutions are only allowed for students graduating in the Associate of Applied Science Oil and Gas Production Technology.
OPENING
The purpose of the Student Oil and Gas Organization (SOGO) is to provide educational, networking, and leadership opportunities for Oil and Gas Production Technology (OGPT) students. SOGO allows students to progress from student to professional through interaction with OGPT faculty and industry professionals.

REVIEW IF PREVIOUS SOGO ACTIVITIES
- LOGA/Desk & Derrick Skeet Shoot(s)
- Golf Tournament

REVIEW OF BY-LAWS AND CONSTITUTION

ELECTION OF OFFICERS
- Review of officer requirements (see attached)
- Self-nomination
- Election Process

COMMITTEE ASSIGNMENTS
- Presentation Committee
- Planning Committee
- Membership Committee
- Fundraising Committee

FUTURE OPPORTUNITIES
- Frisbee Golf Outing
- Smashburger/Newk’s/Chick-fil-a/Applebees Fundraising
- Red River Revel
- Speaker Series
- Industry Event(s)

CLOSING
President
The duties of the PRESIDENT (Pres) shall be: preside over SOGO general assembly meetings and Executive Council meetings, appoint all committees subject to the approval of the Executive Council, assume all other executive duties not otherwise delegated, and shall act as an intermediary between SOGO and LOGA.

Vice President

The VICE PRESIDENT (VP) shall perform the duties of the president in case of the absence of the president or impeachment of the sitting president. The VP shall perform any duties that have been delegated by the Pres or the executive council.

The VP shall keep an updated roll of active members for use by the Executive Council.

Secretary

The SECRETARY (SEC) shall write a report for each general assembly meeting and executive council meeting. It will include: meeting start and stop times, place of meeting, roll of those students present, summary of events, time of next scheduled meeting, and date when report is written.

The SEC shall also prepare an annual report in letter form at the conclusion of each semester with the Executive Council of achievements, activities, etc. All reports must be submitted to the faculty advisor.

Treasurer

The treasurer (TREAS) shall maintain records regarding all dues collected. Dues shall be submitted to faculty advisor for admission to SOGO treasury.

The TREAS shall provide report to faculty advisor regarding need for use of funds.

The TREAS shall provide report to faculty advisor final usage of funds.

Community Outreach Coordinator

The COMMUNITY OUTREACH COORDINATOR (COC) shall assist the LOGA representatives with approval from the Executive Council in matters of volunteering. The position of COC is to foster and develop a positive brand with the local Oil and Gas community through a variety of SOGO sponsored events and volunteer opportunities.

Past President

The PAST PRESIDENT (PPRES) will aid in providing support for the sitting Executive Council.

The PPRES will not be voted in but will serve the term following his/her term as PRES
The past PRES will not serve if he/she had been impeached.

Elections

The officers shall be elected at the last meeting of the Spring Semester by a simple majority vote. Officers elected during the spring will commence term at the beginning of the next fall semester.

Nominees for any Executive Council position must be a full time student in the Bossier Parish Community College OGPT program for at least one term, except for founding officers.

Nominees may not nominate themselves

Nominees for Executive Council must have obtained a minimum GPA of 3.0 in the semester prior to the term in which they will carry out this position, unless otherwise determined by the Executive Council.

No one can hold any office more than two terms.

Executive Council positions are the only positions to be elected by the general assembly.

VI. Executive Council

There are five officers that shall constitute the Executive Council: PRESIDENT, VICE PRESIDENT, SECRETARY, TREASURER, COMMUNITY OUTREACH COORDINATOR, and PAST PRESIDENT.

Term of Office

Persons elected shall take office at the beginning of the Fall Semester following their election each calendar year.

In the event that an officer is unable to fulfill their duties because of any unforeseen circumstance that officer will be replaced pending a vote by the Executive Council. The President shall choose an active member in good standing to replace the elected officer.

Should an officer fall out of good academic standing with BPCC during his/her term the officer shall resign his/her elected office.

If the office in question is that of the PRESIDENT, the VICE PRESIDENT shall assume the office. The Executive Council will determine who is to assume the role of the VICE PRESIDENT. There are six officers that shall constitute the Executive Council: PRESIDENT, VICE PRESIDENT, SECRETARY, TREASURER, COMMUNITY OUTREACH COORDINATOR, and PAST PRESIDENT.
* **Sponsored by LOGA**
  * First student LOGA chapter in state
  * All students in degree program are members
  * Work with LOGA at functions
  * Help sponsor career day
  * Serve as ambassadors for the program
  * Provides monthly speaker series

* **Previous Activities**
  * Sponsor Don Briggs speaking engagement
  * Assist with LOGA State of the Industry Event
  * Help with other LOGA events, such as golf tournament and skeet shoot
  * Ambassadors for the program to other groups
HANDS-ON TEACHING MATERIALS

Current Materials
* Electrical/electronics trainers
* Process control andInstrumentation trainer
* Simtronics Software
* LabVolt Trainer
* Pump trainer
* SPT Group DrillBench Software
  * Dynamic Hydraulics
  * Dynamic Well Control

Materials under procurement:
* Used compressor for use as a trainer
* Christmas tree
* Classroom demonstrators for processes

Needs:
* Appropriate curriculum and textbooks
* Well models
* Used equipment
* H.O.T. Unit trainer
5. Standards for Accreditation – Associate Degree Programs

The objective of accreditation is to ensure that programs in Industrial/Engineering Technology and Applied Engineering which are accredited meet or exceed established standards. Consideration will be given to both the qualitative and quantitative criteria set forth in these standards.

5.1 Preparation of Self-Study Report

Self-Analysis: The Self-Study Report shall follow the established guidelines and be completed by a representative portion of the institution’s administrative staff, teaching faculty, and students.

5.2 Philosophy and Objectives

5.2.1 Mission: The department, college or division, and institutional mission shall be compatible with the approved definition of Industrial/Engineering Technology and Applied Engineering.

5.2.2 Program Definition: The program of study definition and purpose shall be compatible with the approved definition of Industrial/Engineering Technology and Applied Engineering.

5.2.3 Program Acceptance: Each program of study shall be understood and accepted by appropriate individuals and representative groups within the internal college or university community and the external business and industrial community.

5.2.4 Program Goals: Each program of study shall have: (1) clearly written short and long range goals and objectives, which are consistent with the program mission statement; and (2) plans for achieving them.

5.3 Program of Study

5.3.1 Program Name: Each program of study and/or program option shall have appropriate titles consistent with the approved ATMAE definition of Industrial/Engineering Technology and Applied Engineering.

5.3.2 Program Level: The program of study shall lead to the associate degree, and must prepare individuals who will be employed in positions that contribute to the design, development, production, distribution, or operational support of complex technical systems. Programs designed for transfer to baccalaureate level Industrial/Engineering Technology and Applied Engineering programs will also be considered.

5.3.3 Program Definition: The program of study may have more than one option, specialization, or concentration but specific course requirements for each option shall be clearly specified, and the requirements for all program options shall meet or exceed appropriate ATMAE standards.

5.3.4 Program Emphasis: Primary emphasis in the program of study shall reflect the current technology and/or management practices of industry.

5.3.5 Foundation Requirements: Program of study shall be a minimum of 60 semester hours (or equivalent) and must meet the minimum foundation requirements shown in Table 5.1. Programs may exceed the maximum foundation requirements specified in each area, but appropriate justification shall be provided for each program and/or program option that exceeds the maximum limits. A specific list of courses and credit hours that are being counted toward each category shall be included in the Self-Study Report.

5.3.6 Course Sequencing: There shall be evidence of appropriate sequencing of course work in each program of study to ensure that concepts covered in beginning level course work are applied in advanced level courses.

5.3.7 Application of Mathematics and Science: Appropriate applications of the principles of mathematics and science shall be evident in technical and/or management course work.

5.3.8 Computer Applications: The program of study shall include instruction on computer application software and the use of computers for problem solving.

5.3.9 Communications: Oral presentations and technical report writing shall be evident in technical and/or management course requirements.

5.3.10 Industrial Experiences: Each program of study shall include appropriate industrial experiences such as industrial tours, work-study options, cooperative education, or seminars focusing on problem-solving activities related to industry. Industrial experiences shall be designed to provide an understanding of the industrial environment and what industry expects of students upon employment.
5.3.11 Competency Identification: Student competencies shall be identified for each program of study, including all options, which are relevant to current employment opportunities available to graduates.

5.3.12 Competency Validation: Validation of program of study outcomes/student competencies shall be an on-going process and shall be accomplished through a combination of external experts, industrial advisory committee(s), and follow-up studies of program graduates. Documentation of this validation shall be provided in the Self-Study.

5.3.13 Program Development. Revision and Evaluation: Program of study development, revision, and evaluation shall involve currently enrolled students, faculty, program graduates, and representative employers.

5.3.14 Transfer Course Work: Institution and/or department policies shall be used to evaluate course work transferred from other institutions. All programs/options, including those with a significant amount of transfer course work, must meet the minimum credit hour foundation course requirements (Table 5.1) in each curricular category.

5.3.15 Institutional Course Work: Students shall be required to take a minimum of 12 semester hours of Technical and/or Management course work at the institution seeking program accreditation.

5.3.16 Program Publicity: Adequate and Accurate Public Disclosure: Institutions shall broadly and accurately publicize, particularly to prospective students: (a) Industrial/Engineering Technology and Applied Engineering program goals and objectives, (b) preadmission testing, evaluation requirements, and standards, (c) assessment measures used to advance students through the program(s), and (d) fees and other charges.

5.3.17 Legal Authorization: Only institutions legally authorized under applicable state law to provide degree programs beyond the secondary level and that are recognized by the appropriate national or regional accrediting agency are considered for ATMAE accreditation.

5.3.18 Level of Instruction: All course work taken to meet program requirements must be college level. Evidence such as standardized tests or the transferability of coursework to baccalaureate level institutions shall be presented to ensure that courses which meet program requirements are college level.

5.4 Instruction

5.4.1 Course Syllabi: Course syllabi must be presented which clearly describe appropriate course objectives, content, references utilized, student activities, and evaluation criteria. Representative examples of student's graded work shall be available for coursework.

---

**Table 5.1 - Program of Study**

<table>
<thead>
<tr>
<th>Foundation Requirements</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications - Must include one course in written communication and one course in oral communication</td>
<td>6-9</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3-12</td>
</tr>
<tr>
<td>Physical Sciences*</td>
<td>3-12</td>
</tr>
<tr>
<td>Technical - Computer Integrated Manufacturing, Computer Aided Design, Electronics, Materials Science/Testing, Computer Science/Technology, Packaging and Distribution, Construction, Manufacturing Processes, Automotive Technology, Aviation, Diesel Technology, and/or other courses consistent with the approved definition of Industrial/Engineering Technology and Applied Engineering and/or Management - Quality Management, Quality Control, Production Planning and Control, Supervision, Finance/Accounting, Safety Management, Facilities Layout, Materials Handling, Legal Aspects/Law, Marketing, Leadership, Project Management, International Business, Teaming, and/or other courses consistent with the approved definition.</td>
<td>29-45</td>
</tr>
<tr>
<td>Electives</td>
<td>0-12</td>
</tr>
<tr>
<td>Minimum total semester hours</td>
<td>60</td>
</tr>
</tbody>
</table>

*Life Sciences may be appropriate for selected programs of study.*
5.4.2 Reference Materials: Appropriate reference materials such as periodicals, audio-visual materials, websites, and computer application software (when appropriate) shall be utilized for each course or series of courses to supplement textbooks or course packs.

5.4.3 Program Balance: Appropriate laboratory activity shall be included in the program(s) and a reasonable balance must be maintained in course work between the practical application of “how” and the theoretical/conceptual emphasis of “why.”

5.4.4 Problem-Solving Activities: Emphasis in instruction shall be appropriately focused on problem-solving activities which reflect contemporary industrial situations.

5.4.5 Supervision of Instruction: Appropriate supervision of instruction shall be evident throughout the program.

5.4.6 Scheduling of Instruction: The organization and scheduling of instruction shall allow adequate time for completion of appropriate homework assignments and laboratory problem-solving activities.

5.5 Faculty

5.5.1 Full-Time Faculty: Each program of study option shall have an adequate number of full-time faculty.

5.5.2 Minimum Faculty Qualifications: The review of program faculty qualifications shall include current faculty resumes providing clear evidence documenting the extent and currency of: (a) academic preparation, (b) industrial experience related to the program content area(s), (c) current certifications/licensure related to the program content area(s), (d) membership and participation in appropriate professional organizations, and (e) professional activities. The minimum academic qualifications for a regular full-time faculty member is expected to be a bachelor’s degree in a discipline, or in certain cases for documented reasons, an associate’s degree plus professional certification/licensure closely related to the faculty member’s instructional assignments.

5.5.3 Selection and Appointment Policies: Policies and procedures utilized in the selection and appointment of regular full-time faculty shall be clearly specified and shall be conducive to the maintenance of high quality instruction.

5.5.4 Tenure and Reappointment Policies: Faculty tenure and/or reappointment policies and procedures shall be comparable to other professional program areas in the institution. Requirements in the areas of teaching, service, and scholarly activity shall be clearly specified for faculty in Industrial/Engineering Technology and Applied Engineering.

5.5.5 Faculty Loads: Faculty teaching, advising, and service loads shall be comparable to the faculty in other professional program areas at the institution. Consideration shall be given in faculty teaching load assignments to high contact hours resulting from laboratory teaching assignments.

5.6 Students

5.6.1 Admission and Retention Standards: Admission and retention standards shall be established to ensure that students enrolled are of high quality. These standards shall compare favorably with the institution’s standards. Sources of information may include admission test scores, secondary school rankings, grade point averages, course syllabi, course examinations, written assignments, and oral presentations.

5.6.2 Scholastic Success of Students: Students in Industrial/Engineering Technology and Applied Engineering shall have scholastic success comparable to those in other professional curricula in the institution. Graduation practices courses shall be comparable to other departments and/or programs in the institution.

5.6.3 Placement of Graduates: The initial placement, job titles, job descriptions, and salaries of graduates shall be consistent with the program(s) goals and objectives. Industry’s reaction to graduates as employees must be favorable. Follow-up studies of graduates shall be conducted every two to five years. Summary statistics relating to follow-up studies of graduates shall be made available to the visiting team and the public. These statistics shall include placement rates as well as salary levels of program graduates.

5.6.4 Student Evaluation of Program(s): Evaluations of the Industrial/Engineering Technology and Applied Engineering program(s) shall be made by its graduates on a regular basis (two to five years). Reactions and recommendations shall be considered in program revisions.

5.6.5 Student Enrollment: Enrollment shall be adequate in each program area to operate the program(s) efficiently and effectively. The level of available financial and facility resources shall be considered as a constraint on the maximum number of qualified students to be admitted to the program(s). Enrollment trends shall be tracked, and factors affecting enrollment patterns shall be identified and analyzed. Enrollment projections shall be made which closely relate to short and long-range goals as well as financial and physical resource needs.
5.6.5 Advisory and Counseling Services: Adequate and timely advising and counseling services shall be available to students.

5.6.7 Ethical Practices: Ethical practices shall be fostered, including reasonable student refund policies and nondiscriminatory practices in admissions and student employment.

5.7 Administration

5.7.1 Program Administration: Programs in Industrial/Engineering Technology and Applied Engineering are expected to have an identifiable, qualified individual with direct responsibility for program coordination and curriculum development. This individual shall be a full-time employee of the institution.

5.7.2 Administrative Leadership: Individuals assigned to administer Industrial/Engineering Technology and Applied Engineering programs must demonstrate effective leadership and a high level of support.

5.7.3 Administrative Support: There must be appropriate support for Industrial/Engineering Technology and Applied Engineering from the personnel holding leadership positions in the departments and colleges where the program is administratively located.

5.8 Facilities and Equipment

5.8.1 Adequacy of Facilities and Equipment: Physical facilities and equipment, which are adequate and appropriate to serve the goals and objectives of the program(s), shall be available for each program and option. Where facilities and equipment appear to be minimal to support a quality program(s), comparisons with support levels for other professional programs at the institution will be made by the visiting team.

5.8.2 Support for Facilities and Equipment: Facility and equipment needs shall be reflected in the long-range goals and objectives for the program(s) and option(s), and sources of potential funding shall be identified.

5.8.3 Appropriateness of Equipment: Equipment shall be appropriate to reflect contemporary industry. Student use of equipment reflecting current technology practices shall be evident.

5.9 Computer Systems

5.9.1 Availability of Computer Systems: Appropriate and current computer systems and software shall be available to both students and faculty. These systems must cover appropriate functions and applications in which program area. These systems may be on or off-site, as long as the systems are accessible to students and faculty.

5.9.2 Utilization of Computer Systems: Evidence shall be available which indicates that students and faculty are making significant use of computer systems related to program curricula.

5.10 Financial Resources

5.10.1 Financial Support: The budget for the industrial/Engineering Technology and Applied Engineering program(s) shall be adequate to support program objectives. When judging adequacy, the visiting team shall make comparisons with the support levels given to other professional programs at the institution.

5.10.2 External Financial Support: There shall be evidence of external support for the program(s) in Industrial/Engineering Technology and Applied Engineering. However, this external support shall be treated as supplementary support and is to be used to achieve and maintain a high level of program excellence. This external support shall not be used to displace funding support normally provided by the institution.

5.11 Library and Information Resources

5.11.1 Information Resources: The administrative unit containing the Industrial/Engineering Technology and Applied Engineering program(s) and/or the institutional library shall have access to technology resources, literature, and reference materials adequate to meet the curriculum and research needs of students and faculty.

5.11.2 Utilization of Information Resources: Evidence shall be available which indicates that students and faculty are making adequate and appropriate use of library and reference resources.

5.12 Support Personnel

Support Personnel: Personnel such as teaching assistants, student workers, office professionals, and laboratory technicians shall be adequate to support program objectives.
5.13 Placement Services

5.13.1 Placement Services: Appropriate services shall be available to assist with the placement of program graduates. Placement of graduates shall be tracked and the effectiveness of placement services shall be evaluated by the administrative unit containing the Industrial/Engineering Technology and Applied Engineering program(s).

5.13.2 Cooperative Education/Internship: If cooperative education/internship is either a required or an elective part of the program then appropriate services shall be provided to assist with the placement and supervision of students.

5.14 Industrial Advisory Committee(s)

5.14.1 Program Advisory Committee(s): An industrial advisory committee shall assist in the validation of program content. If more than one program of study or program option is available, then appropriately qualified industrial representatives shall be added to the committee or more than one committee shall be maintained. Policies shall be presented to indicate the: (a) procedures used in selecting members, (b) length of appointment, (c) organization of the committee, (d) committee responsibilities, (e) frequency of meetings, and (f) methods of conducting business.

5.14.2 Advisory Committee Meetings: The industrial advisory committee(s) shall meet at least once each year and minutes shall be kept of these meetings showing agenda items, actions taken, and recommendations made.

5.15 Educational Innovation

Educational Innovation: There shall be evidence that program objectives are based upon long-range planning related to the industries being served. Program content must be current in both content and delivery of instruction.

5.16 Assessment

Assessment Plan and Integration: An assessment plan shall be comprised of, but not limited to, the following for each program: (1) program mission statement, (2) program outcomes/student competencies, (3) evidence that the program incorporates these outcomes/student competencies, (4) assessment measures used to evaluate student mastery of the student competencies stated, (5) compilation of the results of the assessment measures, and (6) evidence that these results are used to improve the program.
Enhanced advising and assistance with financial aid forms, etc.

Transportation shuttle

Evening classes

Living wage employment with streamlining opportunities for advancement

Industry-demanded certification with companies willing to hire graduates

15-month program

ENERGY CONSERVATION

ENERGY SERVICES

APPLY NOW!

WWW.BPCC.EDU/TEC

Start Your Technology Career @

Energy Technology
Energy Conservation
33 credit hours

First Semester (8 weeks)
MATH 097-098: Basic Mathematics/Beginning Algebra I
Boardroom Workout: Hands-on Critical Thinking
ENGL 098: Fundamentals of Grammar
ENGL 099: Fundamentals of Composition
EDUC 099: College Success
Study Hall: Applying Math and English Content

Second Semester
CIS 105: Computer Concepts
MATH 099: Beginning Algebra II
CONS 101: Materials and Methods I
Math 129: Applied Technical Math
CONS 102: Materials and Methods II

Third Semester
CONS 103: Air and Water Quality
CONS 105: Energy Usage Optimization
CONS 107: HVAC Optimization
CONS 109: Energy Audits
CONS 180: Energy Conservation Practicum

Fourth Semester (8 weeks)
CONS 140: Construction Safety and the OSHA Standards
CONS 150: Construction Contracting and Laws
CONS 201: BPI Building Analyst Certification Exam Prep (non credit)
CONS 150: Construction Contracting and Laws

For more information, see www.bpcc.edu/TEM
(318) 678-6043

Energy Services
33 credit hours

First Semester (8 weeks)
MATH 097-098: Basic Mathematics/Beginning Algebra I
Boardroom Workout: Hands-on Critical Thinking
ENGL 098: Fundamentals of Grammar
ENGL 099: Fundamentals of Composition
EDUC 099: College Success
Study Hall: Applying Math and English Content

Second Semester
ISAF 210: Industrial Safety and the OSHA Standard (30)"
MATH 099: Beginning Algebra II"
TEED 145: Industrial Mechanical Theory I with Lab"
TEED 153: Fluid Mechanics – Hydraulics/Pneumatics & Lab
TEED 146: Industrial Mechanical Theory II with Lab

Third Semester
MATH 129: Applied Technical Math
TEED 101: Basic Electricity and Lab
TEED 102: Semiconductor Electronics and Lab
TEED 201: Basic Digital Electronics

Fourth Semester (8 weeks)
OGPT 221: Field Processing of Natural Gas OR
TEED 252: Electric Motor Controls & Lab

"NWLTCC: Northwest Louisiana Technical College
GRANTS & GIFTS

Carl Perkins – 2010

*$200K – LabVolt 3531 7 student trainer
*Process Control and instrumentation

Rapid Response – LCTCS

*$120K – Simtronics software with 20 licenses
*Set aside funds for new Instructor first year salary
*New funding for classroom demonstrators

Industry Grants – Program Support

*Industry support has provided funds for 2010-2012
  * Instruction Materials
  * Faculty and Adjunct Salaries
  * Student events
  * Faculty Training
Equipment and software plan to accommodate multi-program use
All programs sharing resources
Enlarge and make home to more class/lab programs

Permanent Facility

Two separate spaces within the Lab
Oil and Gas Lab & Construction Lab
3 days - 1350 sq. feet

Temporary - Building J, Physical Plant

Facilities Update
WINLA ENERGY GRANT

*Certifications
  * Energy Conservation Certification
    (Certificate of Technical Studies in Construction Technology)
  * Energy Services Certification
    (Siemens Mechatronics Technician)

*What areas of study most important
  * Building Analyst
  * Energy Conservation
  * Oil and Gas Production
  * Construction

*Enrollment:
  * Program commenced in Summer, 2012
  * Approximately 25 students enrolled
ASSOCIATION & ALLIANCES
Center for the Advancement of Process Technology
College of the Mainland – Texas City, TX
National Science Foundation Project
PTEC Curriculum – Industry Driven Processing Training
Annual CIPB Conference for Educators

North American Process Technology Alliance
Quarterly Meetings with Industry
Annual Instructor Skills Workshop
Assist in Curriculum Development
PTEC to be expanded to have various focuses including:
  Oil and Gas Production
### Summary of Spring 2012

**Associate of Applied Science in Oil and Gas Process Technology**

Learning Outcome A: relate the processes which lead to the geological origins of oil and gas and the process of its accumulation within the earth's crust.

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
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<tbody>
<tr>
<td>OGPT 101</td>
<td>34</td>
<td>31</td>
<td>18</td>
<td>58.06%</td>
<td>41.86%</td>
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<td>TOTAL</td>
<td>34</td>
<td>31</td>
<td>18</td>
<td>58.06%</td>
<td>52.94%</td>
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</table>

Learning Outcome B: explain the procedures and evaluate the options for fossil fuel exploration, drilling, well completion, production, recovery, and processing.

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
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</thead>
<tbody>
<tr>
<td>OGPT 101</td>
<td>34</td>
<td>31</td>
<td>18</td>
<td>58.06%</td>
<td>41.86%</td>
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<tr>
<td>OGPT 103</td>
<td>27</td>
<td>25</td>
<td>21</td>
<td>82.59%</td>
<td>78.13%</td>
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<td>12</td>
<td>10</td>
<td>80.46%</td>
<td>71.43%</td>
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<tr>
<td>OGPT 207</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>OGPT 217</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>100%</td>
<td>92.31%</td>
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<tr>
<td>OGPT 221</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>87.06%</td>
<td>81.32%</td>
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<tr>
<td>TOTAL</td>
<td>109</td>
<td>100</td>
<td>79</td>
<td>78.75%</td>
<td>72.59%</td>
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</tbody>
</table>

Learning Outcome C: discuss all subject matter using industry terminology and prepare written summaries of industry issues.

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
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</tr>
</thead>
<tbody>
<tr>
<td>OGPT 150</td>
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<td>11</td>
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<tr>
<td>OGPT 207</td>
<td>8</td>
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<td>100%</td>
</tr>
<tr>
<td>OGPT 217</td>
<td>13</td>
<td>12</td>
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</tr>
<tr>
<td>OGPT 260</td>
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<td>3</td>
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<td>60%</td>
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<tr>
<td>TOTAL</td>
<td>37</td>
<td>34</td>
<td>34</td>
<td>100.00%</td>
<td>91.89%</td>
</tr>
</tbody>
</table>

Note that OGPT 270 and 280 were not taught this semester.

Learning Outcome D: demonstrate competent operational ability for basic electrical equipment, hydraulics, pneumatics, and fluid dynamics equipment; pumps and compressors; oil and gas instrumentation equipment; and oil and gas processing equipment.

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
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<tr>
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<tr>
<td>TEED 153</td>
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<tr>
<td>TEED 245</td>
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<td>10</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>OGPT 203</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>OGPT 221</td>
<td>13</td>
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<td>11</td>
<td>87.06%</td>
<td>81.32%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>95</td>
<td>90</td>
<td>82</td>
<td>90.84%</td>
<td>86.39%</td>
</tr>
</tbody>
</table>

Learning Outcome E: understand well analysis processes and procedures, the well decision process, the economics of production and recovery.

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
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<th>Evaluated Student Success</th>
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<tbody>
<tr>
<td>OGPT 150</td>
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<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>OGPT 207</td>
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<td>8</td>
<td>8</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>OGPT 217</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>100%</td>
<td>92.31%</td>
</tr>
</tbody>
</table>
Learning Outcome E: perform work functions within the regulatory and safety systems established for the industry

Summative Assessment: Average results from all learning outcomes in the courses listed below

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISAF 109</td>
<td>28</td>
<td>22</td>
<td>22</td>
<td>100%</td>
<td>78.57%</td>
</tr>
<tr>
<td>ISAF 209</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>TOTAL</td>
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<tr>
<td>AASOGPT</td>
<td>58</td>
<td>53</td>
<td>45</td>
<td>86.72%</td>
<td>80.17%</td>
</tr>
</tbody>
</table>

Faculty response 2012-08-16: There will be an increased emphasis in classes with hands-on activities with the new grant equipment purchases that have been made. SOGO is growing to increase student involvement in the program and there will be on-going recruitment and focus on increasing student success.
OGPT 101

Changes needed to improve student success:
Salinas: More time should be spent on distribution. Class lecture was based on book, which has little on distribution.
Salinas: This was a session C hybrid course. Very difficult to teach in such a short period of time. Students had a difficult time.

Changes needed to improve retention:
Salinas: Make class more hands on.
Salinas: Make class more hands on.

Summary of results from all Learning Outcomes

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>34</td>
<td>31</td>
<td>18</td>
<td>58.06%</td>
</tr>
</tbody>
</table>

Faculty response August 16, 2012: Faculty will have more demonstrations with field equipment. Faculty will distribute power points.

OGPT 103

Changes needed to improve student success:
Salinas: Add more requirements to enable students to stay on track, IE: More quizzes.
Salinas: Add more hands on - hard to keep students engaged.

Changes needed to improve retention:
Salinas: For hybrid courses, need to have more online participation.
Salinas: Daily in class grades, more quizzes.

Summary of results from all Learning Outcomes

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>OGPT103</td>
<td></td>
<td>27</td>
<td>25</td>
<td>21</td>
<td>92.59%</td>
</tr>
</tbody>
</table>

Faculty response August 16, 2012: Faculty made all assignments due. Faculty will use more Google and website for class. There will be another rig visit possibly including Expo and/or Midstream.

OGPT 131

Changes needed to improve student success:
Salinas: Hybrid courses are hard enough, but one night a week really lost most students, no more one night hybrids!

Changes needed to improve retention:
Salinas: Hybrid courses are hard enough, but one night a week really lost most students, no more one night hybrids!

Summary of results from all Learning Outcomes

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
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<tbody>
<tr>
<td>OGPT131</td>
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<td>14</td>
<td>12</td>
<td>10</td>
<td>90.46%</td>
</tr>
</tbody>
</table>

Faculty response August 16, 2012: Faculty will add rig visit. Pobably with Expo and Midstream.

OGPT 150

Changes needed to improve student success:
Salinas: Need real world experience. Make regulatory real to students.

Changes needed to improve retention:
Salinas: Regulatory is a dry subject. Need to find ways to make it more exciting...

Summary of results from all Learning Outcomes

<table>
<thead>
<tr>
<th>Course</th>
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<th>Students Evaluated</th>
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<th>Evaluated Student Success</th>
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</tr>
</thead>
<tbody>
<tr>
<td>OGPT150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Faculty response August 16, 2012: Faculty will make more interactive quizzes and have students focus on showing what they know. Instructor wants regularly schedule classes with engineering company.

OGPT 203

Changes needed to improve student success: Please enter as at least two sentences.
Islam: Lab facilities should be improved. Books and other supplies must be available ahead of starting the class.

Changes needed to improve retention: Please enter as at least two sentences.
Islam: The students must be informed of the future job opportunities locally and nationally. The students must be prepared well in the areas of mathematics.

Summary of results from all Learning Outcomes

<table>
<thead>
<tr>
<th>Course</th>
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<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>OGPT203</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Faculty response August 16, 2012: Faculty will make a job wall on Facebook page for BPCC Engery Students. Faculty will look at bulletin boards to fill the window.

OGPT 207

Changes needed to improve student success: Please enter as at least two sentences.
Hitchcock: No comment

Changes needed to improve retention: Please enter as at least two sentences.
Hitchcock: No comment

Summary of results from all Learning Outcomes

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
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<th>Evaluated Student Success</th>
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</tbody>
</table>

Faculty response August 16, 2012:

OGPT 217

Changes needed to improve student success: Please enter as at least two sentences.
Maranto: No comment

Changes needed to improve retention: Please enter as at least two sentences.
Maranto: No comment

Summary of results from all Learning Outcomes

<table>
<thead>
<tr>
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<td>12</td>
<td>12</td>
<td>100%</td>
<td>92.31%</td>
</tr>
</tbody>
</table>

Faculty response August 16, 2012: New faculty for fall 2010 for this course.

OGPT 221

Changes needed to improve student success:
Duplichan: Has problems with attendance.

Changes needed to improve student success:
Duplichan: Class room with separate computer island. Session 501 class has had no problems with students. a real nice class to work with.

Summary of results from all Learning Outcomes

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
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<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
</table>
Faculty response August 16, 2012. Faculty will suspend. Instructor recommends that e-216 not be used for course and students lack focus in this room.

**OGPT 260**

**Changes needed to improve student success:**
Duplichan: Attendance problem

**Changes needed to improve retention:**
Duplichan: n/a

<table>
<thead>
<tr>
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</thead>
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<tr>
<td>OGPT 260</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>100%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Faculty response August 16, 2012. Faculty will suspend students.

**ISAF 109**

**Changes needed to improve student success:**
Cooper: During semester long training to ensure retention and competency in prep for the CAPStone testing

**Changes needed to improve retention:**
Cooper: Student have more outside prep work for several class session

<table>
<thead>
<tr>
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<td>22</td>
<td>22</td>
<td>100%</td>
<td>78.57%</td>
</tr>
</tbody>
</table>

Faculty response August 16, 2012. Faculty is preparing for summer course.

**ISAF 209**

**Changes needed to improve student success:**
Cooper: No comment

**Changes needed to improve retention:**
Cooper: No comment

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ISAF 209</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Faculty response August 16, 2012. Great class and student had a good time.
The meeting attendees represent BPCC, industry, and student interests. The following persons were in attendance:

Linda Sonnier – Construction Program Director
Joey French – French Engineering
Josh Johnson – Ivey’s Building Materials Center
Miles Hitchcock – Mathematics Instructor
Kyle Hand – Hand Construction
Brent Templet – State Licensing Board Contractors
Bailey Smith – Energy Grant Coordinator
Laura Neubert – LaDanCo, LLC.
Mike Boggs – Boggs & Poole
Kevin Singh – LaTech School of Architecture
Laura Goadrich – Dean, Technology, Engineering, & Mathematics
Sandra Partain – Program Coordinator, Science, Nursing, & Allied Health
Lola Kendrick – CERT
Sally Namie – Bossier School System
Lisa Dumas – Construction Program graduate, Ray Anderson
David Manry – University of Louisiana at Monroe
Richard Matkins – Usage Vicksburg District
Tracey Graham – City of Shreveport
Kim Mitchell – SMBB Architects

In the course of the meeting, the committee reviewed the required hours for the Construction Program as well as the unofficial curriculum.
Construction Programs Advisory Committee Meeting Minutes  
September 11, 2012  
2 p.m. in A230

Attendees:

Linda Sonnier  Sandra Partain
Joey French    Lola Kendrick
Josh Johnson   Sally Namie
Miles Hitchcock Stan Wilkins
Kyle Hand      Lisa Dumas
Brent Templet  David Manry
Bailey Smith   Richard Matkins
Laura Neubert  Tracey Graham
Mike Boggs     Kim Mitchell
Kevin Singh    
Laura Goadrich

Welcome

Laura Goadrich, Dean of Technology, Engineering, & Mathematics, offered a warm welcome to the committee at 2pm. Round table introductions were offered so that everyone could become acquainted.

Leadership for the Committee

Linda Sonnier explained the importance of industry leadership and guidance for the Advisory Committee. She welcomed volunteers to step forward to lead the committee this academic year. No one immediately offered, but should anyone be interested they need only contact Linda.

Progress Report on the Programs

Linda went through the handout packet with the committee, explaining what would be discussed. The handouts are available at the end of these minutes for further reference.

The programs are experiencing an all-time low in enrollment. There are currently 17 enrolled in the AAS and 8 in the certificate programs. There is an incoming class and students are graduating from the programs, but there is a definite lag in enrollment for those in the middle of their college careers. Linda offered the decline in the economy as a partial reason for the low enrollment.

Linda took the time to ask for feedback from the committee on what can be presented to middle college students to increase their interest in the program. Some points that she already has are the male to female ratio and being able to say “I helped build that.” If anyone has any suggestions, please contact Linda.

A moment was taken to recognize the great work being done by the faculty and adjuncts. Bailey Smith’s internship class this summer was able to boast that all students were successfully placed in jobs. Joey French’s Surveying class is a popular alternative to Trigonometry because of its real world applications.
Learning Outcomes

Laura Goadrich presented information on the program’s learning outcomes which are needed for both SACS and ATMAE accreditation. The outcomes include objectives and goals for the programs. Some of the classes have been combined. Overall, students perform extremely well in the program. The overall success rate based on the 14-day count is 95%. The information presented in the Learning Outcomes is an average result of the students and is a great way to quantify the data without looking at each class. Everything in the programs matches and builds toward the Learning Outcomes.

Graduates & Placement

Placement has not been a problem for graduates, but the administration and faculty would like to see more grads working with local companies. Currently the ratio is 2:1 in favor of large, out-of-area companies.

Adapting to Changing Local Opportunities

Linda asked for input from the committee on how the construction industry and market are changing. Lola Kendrick will bring current data from the Workforce Commission to the next meeting. But overall, construction opportunities district-wide seem to be flourishing.

Bailey Smith asked the industry members present where they would place recent graduates should they come to work. The general consensus was that graduates should start their careers in the field. Office jobs are nice, but in the construction industry, a person needs to experience all aspects to be successful.

Stan Wilkins, Vice Chancellor for Academic Affairs, asked the committee what makes individuals want to leave the construction industry. The resounding answers were the heat and not wanting to work, or put in the time. All agreed that students need to hear these comments from industry professionals, but students will still need to spend time in the industry to really understand. Internships are critical to showing construction students what this profession includes. It was suggested that all instructors be clearer in what the students are told and the skills that they are given. CONS 102 is a methods class that will provide experience in the classroom and hopefully prepare students for projects they will encounter on-the-job. With this class, internships will not have to be relied on fully to introduce real-world concepts.

Linda Sonnier is also trying to reach out to the supplier chain or internship opportunities. New internships are in the works with Ivey’s Building Materials Center.

Richard Atkins inquired as to the average age of the program’s graduates. 25-26 is the average age. His suggestion was to discuss expectations of the job in the classroom. It was expressed that most students would prefer to be on the job site, but may not know exactly what that entails.

Accreditation

Positive feedback was received from ATMAE during the team visit in the spring. What was impressive to the team was the integration of speech credits in the program. Four separate classes show that students earn an hour of speech credit each, which is more than one 3-credit speech class. Also noted by ATMAE were the supplies and equipment available to students. In mid-November the final results of the accreditation visit will be made available.
David Manry from the University of Louisiana at Monroe spoke about the effort that is being made to match ULM’s program with BFCC’s. They will be using our agreement with Louisiana Tech as a guide.

**Equipment**

A Residential Weatherization Training Lab is planned with funds from Carl Perkins. Currently there is no commercial trainer available for purchase, but this residential trainer will be a great addition to the Construction programs.

**Grants and Gifts/New Programs**

The WINLA grant from Community Foundation introduced a strong group of students to the program this summer. Energy Conservation is one of the tracks offered. Students will learn to audit and manage buildings. The classes this Fall in which the students are enrolled are providing them the pre-requisites upon which to build their knowledge in the Spring semester. Currently, 9 students are enrolled in the program and more are expected in Spring.

**New Industry-Recognized Credentials**

Starting in Session C (October 11-December 10, 2012), CONS 200: Sustainable Construction Science will offer a 16-hour online preparation class for the USGBC LEED Green Associate Exam.

The Building Performance Institute (BPI) credential for Energy Analyst is also new for the Construction Programs.

**Short and Long Term Goals**

Please see the attached handout for a complete listing of the goals for the Construction Programs.

Linda Sonnier noted that the MOUs are all worked out and recommendations will be gladly accepted. Currently there are none available in the AAS.

The establishment of a materials testing lab as well as community-wide understanding of the construction industry are desired for the program. Understanding the industry may help draw more students to the program, especially if it can be conveyed that construction is not just about swinging hammers.

Discussion was held about what the Construction Program could do to address the issues examined by the advisory board. Several ideas were posed, from having students complete a personality profile to offering a series of speakers on construction-related topics. Overall, the committee seemed unanimous in their belief that the program (classes, labs, internships, etc.) may not be able to fix the issues. Instead students will just have to experience the construction industry for themselves.

**Adjourn**

Discussion continued on the previous topics of internships and student expectations. Linda Sonnier requested that any further suggestions for the Program would be gladly accepted. She thanked everyone for attending and their continued support, and dismissed the meeting at 3:30 p.m.
Advisory Committee Agenda
Construction Programs
September 11, 2012

1. Welcome and Introductions

2. Leadership for the Committee * *
   Laura Goadrich

3. Progress Report on the programs:
   AAS – Construction Technology and Management
   CTS – Construction Technology
      NCCER Option
      Energy Conservation Option
   TCA – Construction Readiness
      Theory Option
      NCCER Option
   a. Enrollment – AAS (17) & CTS (8)
   b. Courses Offered and Instruction
   c. Learning Outcomes
   d. Graduates and Placement
   Linda Sonnier

4. Adapting to Changing Local Opportunities * *
   Committee Discussion

5. Accreditation – ATMAE
   Laura Goadrich

6. Equipment
   Linda Sonnier

7. Grants and Gifts
   Linda Sonnier

8. Facilities
   Laura Goadrich

9. New Programs * *
   Linda Sonnier
   a. CTS – Construction Technology
      (Energy Conservation Option)

10. New Industry Recognized Credentials * *
    Linda Sonnier
    a. Building Performance Institute – Energy Analyst
    b. USGBC LEED Green Associate Exam Prep

11. Short and Long Term Goals * *
    Linda Sonnier

12. Thanks and Adjourn
    Laura Goadrich

   * * Action Item
Program Mission:
The Associate of Applied Science in Construction Technology and Management provides the graduate with knowledge and applied technical skills needed to enter and be successful in the construction field.

Specific Degree Information:
The Associate of Applied Science in Construction Technology and Management is a 63-semester hour, two-year curriculum emphasizing skills and knowledge essential for employment leading to a management position in the construction business. The program includes training in the areas of materials and methods of construction, construction safety and OSHA requirements, contracting and laws, construction graphics and specifications, plan surveying, computerized estimating systems, statics, strengths of materials, computerized management systems, and a semester-long internship with a professional construction company. This program is designed to provide strong foundations in these areas as well as in math, physics, and English.

Required courses for the Associate of Applied Science in Construction Technology and Management:

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td>BADM 105: General Business Administration</td>
<td>3</td>
</tr>
<tr>
<td>CIS 105: Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CONS 101: Materials and Methods I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101: Composition and Rhetoric I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 102: College Algebra</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th><strong>Second Semester</strong></th>
<th><strong>Hours</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 112: Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>CONS 102: Materials and Methods II</td>
<td>3</td>
</tr>
<tr>
<td>CONS 150: Construction Contracting and Laws</td>
<td>3</td>
</tr>
<tr>
<td>CONS 160: Construction Graphics and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 105: Elemental Physics</td>
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<td>PHSC 105L: Elemental Physics Lab</td>
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<table>
<thead>
<tr>
<th>SOPHOMORE YEAR</th>
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<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td>CONS 200: Sustainable Construction Science</td>
<td>3</td>
</tr>
<tr>
<td>or CONS 205: Mechanical and Plumbing Systems</td>
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</tr>
<tr>
<td>TEED 171: Building Information Modeling</td>
<td>3</td>
</tr>
<tr>
<td>CONS 140: Construction Safety and the OSHA Standards</td>
<td>3</td>
</tr>
<tr>
<td>CONS 210: Construction Surveying and Lab</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>CONS 220</td>
<td>Construction Estimating</td>
</tr>
<tr>
<td>CONS 220L</td>
<td>Construction Estimating Lab</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSC 202</td>
<td>State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>CONS 230</td>
<td>Statics and Strengths of Materials</td>
<td>3</td>
</tr>
<tr>
<td>CONS 250</td>
<td>Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>CONS 250L</td>
<td>Construction Management Lab</td>
<td>1</td>
</tr>
<tr>
<td>CONS 280</td>
<td>Construction Management Internship</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total credit hours**

63

The graduate requirements for Oral Communication, Critical Thinking and Library Skills is satisfied by Associate of Applied Science Construction Technology and Management graduates completing CONS 101, CONS 102, CONS 150, and CONS 250. Note that this substitution is only allowed for students graduating in the Associate of Applied Science Construction Technology and Management.
Certificate of Technical Studies in Construction Technology

Specific Program Information:

The Certificate of Technical Studies in Construction Technology is a 33-semester hour curriculum emphasizing skills and knowledge essential for employment leading to a construction specialization. The program includes training in the areas of materials and methods of construction, construction safety and OSHA requirements, contracting and laws, construction graphics and specifications, and specialized knowledge in NCCER Construction Tech or Energy Conservation.

Required courses for the Certificate of Technical Studies in Construction Technology:

<table>
<thead>
<tr>
<th>Core Classes</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 129: Applied Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 102: College Algebra</td>
<td></td>
</tr>
<tr>
<td>CIS 105: Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CONS 101: Materials and Methods I</td>
<td>3</td>
</tr>
<tr>
<td>CONS 102: Materials and Methods II</td>
<td>3</td>
</tr>
<tr>
<td>CONS 141: Construction Safety and the OSHA Standards</td>
<td>2</td>
</tr>
<tr>
<td>CONS 150: Construction Contracting and Laws</td>
<td>3</td>
</tr>
<tr>
<td>CONS 160: Construction Graphics and Specifications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Specialization Hours: 13

Total Credit Hours: 33

NCCER Construction Tech Specialization

<table>
<thead>
<tr>
<th>NCCER Construction Tech Specialization</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 104: NCCER Core Curriculum</td>
<td>1</td>
</tr>
<tr>
<td>CONS 106: NCCER Level I (A) Cons Tech</td>
<td>3</td>
</tr>
<tr>
<td>CONS 108: NCCER Level I (B) Cons Tech</td>
<td>3</td>
</tr>
<tr>
<td>CONS 110: NCCER Level II Cons Tech</td>
<td>3</td>
</tr>
<tr>
<td>Approved CONS or TEED Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Students will sit for NCCER Certification exams as part of the program of study and be awarded appropriate national certifications.

Students must meet prerequisites before taking any given course.

Students must meet the general competencies for the academic certificate.
Technical Competency Area in Construction Entrepreneurship

Learning Outcomes:

Recipients of Technical Competency Area in Construction Entrepreneurship will have demonstrated

A. competencies necessary to preparation for successful business ownership, including entrepreneurial characteristics, business ethics, and management concepts;
B. ability to plan, develop, and coordinate the construction process;
C. ability to oversee the project and ensure that it is successfully completed within the estimated time;
D. ability to manage the project under the guidance of an agreement that is legally binding and has to complete the project as per the stipulated conditions; and
E. preparation for satisfying the Louisiana State Licensing Board for Contractors (LSLBC) licensing requirements.

Specific Program Information:

The Technical Competency Area in Construction Entrepreneurship is a 9-semester hour curriculum, emphasizing skills and knowledge essential for management-level employment in the construction field. The program includes training in the areas of entrepreneurship, safety, construction management, and licensing board test preparation.

Required courses for the Technical Competency Area in Construction Entrepreneurship:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 216</td>
<td>Small Business Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>CONS 141</td>
<td>OSHA 30 Hour Construction Safety</td>
<td>2</td>
</tr>
<tr>
<td>CONS 251</td>
<td>Advanced Construction Management</td>
<td>2</td>
</tr>
<tr>
<td>CONS 260</td>
<td>Construction Mentorship</td>
<td>1</td>
</tr>
<tr>
<td>CONS 270</td>
<td>Contractors Licensing Preparation</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>
Technical Competency Area in Construction Readiness

The Technical Competency Area in the Construction Readiness will produce skilled employees for the construction industries. Skills taught are derived from typical requirements for existing construction employees and those entering the workforce. The Construction Readiness program is based on participative learning, which also provides progress checks, unit assessments and skill practice throughout various units.

Learning Outcomes:

Recipients of the Technical Competency Area in Construction Readiness will have demonstrated:

A. Develop an understanding of construction principles
B. Increase interpersonal and team effectiveness skills
C. Expand quality control and problem solving skills
D. Build the construction skills necessary to interpret instructions, graphics and specifications required
E. Build the construction skills necessary to produce the work outlined in the instructions, graphics and specifications in a workmanlike manner
F. Build an educational foundation for continued on-the-job training as a commercial or residential construction employee

Required courses for the Technical Competency Area in Construction Readiness:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 129</td>
<td>Applied Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CONS 101</td>
<td>Materials and Methods I</td>
<td>3</td>
</tr>
<tr>
<td>CONS 102</td>
<td>Materials and Methods II</td>
<td>3</td>
</tr>
<tr>
<td>CONS 160</td>
<td>Construction Graphics and Specifications</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 12

NCCER Option:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 104</td>
<td>NCCER Core Curriculum</td>
<td>1</td>
</tr>
<tr>
<td>CONS 106</td>
<td>NCCER Level I (A) Cons Tech</td>
<td>3</td>
</tr>
<tr>
<td>CONS 108</td>
<td>NCCER Level I (B) Cons Tech</td>
<td>3</td>
</tr>
<tr>
<td>CONS 110</td>
<td>NCCER Level II Cons Tech</td>
<td>3</td>
</tr>
<tr>
<td>CONS 141</td>
<td>OSHA 30 Hour Construction Safety</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Credit Hours 12
Associate of Applied Science
Construction Technology and Management

Learning Outcomes – Course Relationships

A. knowledge of the properties of construction materials, and knowledge and skills in the use and application of construction materials commonly used in residential and commercial construction;
    CONS 101
    CONS 102

B. understanding of the major components of the construction contract, bid process, laws and regulations governing the construction industry; and knowledge of personal safety, as well as the OSHA requirements, for safety of all supervised employees on the construction project.
    CONS 140
    CONS 150

C. ability to interpret construction graphics, specifications, and other documents used for the construction, modification, and repair of buildings, and to communicate graphically when required;
    CONS 160
    TEED 171

D. ability to prepare a complete estimate for a residential or commercial building to arrive at a profitable bid; and the ability to manage the project delivery process, including coordination of the diverse activities found in a construction project with planning, scheduling, and fiscal control;
    CONS 220
    CONS 220L

E. ability to communicate effectively with design consultants to manage changes and redirection of the project as required during the construction phase; and the ability to communicate effectively with project owner, colleagues and employees; and work efficiently and effectively with other construction personnel;
    CONS 101
    CONS 102
    CONS 250
    CONS 250L

F. knowledge of fundamental skills of plane surveying; and
    CONS 210

G. knowledge of the equilibrium mechanics of stationary bodies, and the ability of a material to withstand an applied stress without failure.
    CONS 101
    CONS 230
Weatherization Auditing is the practice of protecting a home or building, its interior, and its occupants from the elements, particularly from sunlight, precipitation, and wind. Weatherization also includes modifying a building to reduce energy consumption and optimize energy efficiency.

Students will become proficient in energy conservation and weatherization, learning the "whole house" approach, focusing on efficient bypass sealing, heat loss theory, pressure effects, and moisture problems and mitigation.

They will be able to identify problems within a structure and define a strategy for corrective measures.

**Diagnostics House**
Residential environment designed to simulate aspects of weatherization techniques found within a home. Pressure Testing, Air Flow, etc.

**Classroom Package**
- Blower Door
- Pressure Gauge DG-700
- Exhaust Fan Flow Meter
- Duct Blaster
- FLIR Infrared Camera
- Combustion Analyzer
- Ambient CO Monitor
- Smoke Puffer
- Laptop Computer

**Testing Equipment**
- Combustion Analyzer
- Continuous combustion and emissions sampling of furnaces, boilers, and appliances.
- Thermal Imager
- Real-time environmental heat variations for residential diagnostics such as moisture, leak detection, and energy losses.
- Ambient CO Monitor
- Detects ambient Carbon Monoxide, the "silent killer"—gas is invisible, no smell or taste.

**Energy Auditor**
- Code Requirements
- Testing and Comparison Analysis
- Inspection & Measurements
- Steam/Water Pipe
- Opening inspection
- Insulation Voids
- Thermal Imaging
- Air Pressure
- Zoned Testing
- Envelope Leak
- Blower Door
- CO Testing
- Energy Efficiency, Lighting, etc.

**Weatherization Installer**
- Attic Insulation/Insulation
- Weatherization Measures
- Building Science
- The Driving Forces of Air Leakage
- The Interrelationship of Home Components
- Home as a System
- OSHA Standards
- Materials and Safety
- EPA Guidelines for Health Hazards
- Safe Work Practices
- Construction Math
- Verbal and Written Information
- Computers
- Basic Competency Skills
Energy Efficiency, Building Durability, and Human Health

This course combines skills for both the Auditor and the Installer, which means that students will work hands-on with all aspects of weatherization as it relates to residential dwellings. Below are skills that will be acquired through the completion of this course. Students will:

- Gather all information on the home, including results of diagnostic tests.
- Use auditing software or other methods to estimate potential energy savings.
- Identify energy-related health and safety measures required.
- Develop an understanding of building sciences and concepts.
- Understand the techniques and requirements for repair or installation.

Instructor Package
- Instructor Guide
- Instructor PowerPoint Presentation
- Residential Energy Theory Text
- Energy Auditor Field Guide
- Building Analyst Field Training Video

Student Package
- Residential Energy Theory Text
- Energy Auditor Field Guide
- Weatherization Tool Set

Hands-On Props
- Air Sealing
- Wall Insulation
- Weather Stripping
- Two-Part Spray Foam
- Duct Insulation
- Attic Treatment & Insulation
- Stack Effect
- Duct Blaster
- Blower Door
- Exhaust Fan Flow Meter
- Back Draft
- Combustion Analysis
- Carbon Monoxide Detection
- Infrared Camera and Thermographic Measurement Techniques

14 Real-World, Hands-On Simulators!

All hands-on exercises are provided in real-world environments or using props to simulate theory as well as hands-on weatherization methods.

Copyright 2013 Graymark International, Inc. All rights reserved.
Why the Home Weatherization Installer & Energy Auditor Training Lab?

- Matched to DOE competencies.
- Meets BPI Building Analyst Exam Objectives.
- Enables reliable replication of training.
- Simple, clear, and easy to use.
- Classroom and hands-on experience.
- Curriculum/Trainer's Guide, supported by Instructional PowerPoint presentation.

The US Department of Energy (DOE) Weatherization Assistance Program (WAP) will distribute $5 billion to the states under the American Recovery & Reinvestment Act (ARRA) of 2009.

With $5 billion through the WAP and another $3 Billion through the State Energy Program, the DOE will partner with State and Local governments to put Americans to work by creating 100,000 new jobs, and the first two jobs that will be created by this partnership will be:

☆ Home Weatherization Installer
☆ Energy Auditor

Lab-Volt®

For pricing or product information, contact your local Lab-Volt representative.
800-LAB-VOLT
www.labvolt.com
Certificate of Technical Studies in Construction Technology

Learning Outcomes:

Recipients of Certificate of Technical Studies in Construction Technology will have demonstrated:

A. knowledge of the properties of construction materials, and knowledge and skills in the use and application of construction materials, commonly used in residential and commercial construction;

B. understanding of the major components of the construction contract, bid process, laws and regulations governing the construction industry;

C. ability to interpret construction graphics, specifications and other documents used for the construction, modification, and repair of buildings, and to communicate graphically when required;

D. specialized knowledge in the area of the certificate emphasis; and

E. knowledge of personal safety, as well as the OSHA requirements, for safety of all employees on the construction project.

Specific Program Information:

The Certificate of Technical Studies in Construction Technology is a 33-semester hour curriculum emphasizing skills and knowledge essential for employment leading to a construction specialization. The program includes training in the areas of materials and methods of construction, construction safety and OSHA requirements, contracting and laws, construction graphics and specifications, and specialized knowledge in NCCER Construction Tech or Energy Conservation.

Required courses for the Certificate of Technical Studies in Construction Technology:

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 129</td>
<td>Applied Technical Mathematics or MATH 102: College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>CIS 105</td>
<td>Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CONS 101</td>
<td>Materials and Methods I</td>
<td>3</td>
</tr>
<tr>
<td>CONS 141</td>
<td>Construction Safety and the OSHA Standards</td>
<td>2</td>
</tr>
<tr>
<td>CONS 150</td>
<td>Construction Contracting and Laws</td>
<td>3</td>
</tr>
<tr>
<td>CONS 160</td>
<td>Construction Graphics and Specifications</td>
<td>3</td>
</tr>
</tbody>
</table>

17

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 102</td>
<td>Materials and Methods II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Specialization Hours</td>
<td>13</td>
</tr>
</tbody>
</table>

16

Total Credit Hours

33

20
**Energy Conservation Specialization**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 103</td>
<td>Air and Water Quality ** NWLTC</td>
<td>3</td>
</tr>
<tr>
<td>CONS 105</td>
<td>Energy Usage Optimization ** NWLTC</td>
<td>3</td>
</tr>
<tr>
<td>CONS 107</td>
<td>HVAC Optimization ** NWLTC</td>
<td>2</td>
</tr>
<tr>
<td>CONS 109</td>
<td>Energy Audits ** NWLTC</td>
<td>3</td>
</tr>
<tr>
<td>CONS 180</td>
<td>Energy Conservation Practicum ** NWLTC</td>
<td>1</td>
</tr>
<tr>
<td>CONS 201</td>
<td>BPI Building Analyst Certification Exam Prep</td>
<td>1</td>
</tr>
</tbody>
</table>

** NWLTC – This designates courses which will be taught at Northwest Louisiana Technical College – Shreveport Bossier Campus and qualify for corresponding course credit at BPCC.

Graduates will be sitting for the Building Performance Institute Building Analyst Certification exam upon completion of the Energy Conservation Program. This is a national certification in building performance.

Students must meet prerequisites before taking any given course.

Students must meet the general competencies for the academic certificate.
Construction Programs Goals
DRAFT
For Review by Committee on 9/12/2012

Long Term -

1. Establish MOU's for AAS-Construction Technology and Management to at least 3 Bachelor degree programs.
   
   Suggested programs:

2. Establish a materials testing lab to continue to develop the materials properties skills of all students.
   
   Suggested equipment/tests:

3. Gain community-wide understanding of the scope of the Construction program (not just a carpentry class).
   
   Suggested venues:

Short Term -

1. Build enrollment through working with Middle College and Dual Enrollment.

2. Build NCCER both as a specialization and as a path to the AAS - CTM.

3. Officially ladder the CTS - Construction Technology to the AAS – CTM.

4. Rebuild the Entrepreneurship TCA as an alternate capstone for the AAS - CTM.

5. Improve teaching effectiveness through additional training and mentoring for full-time and adjunct faculty.
### Summary of Semester

**Results of Learning Outcomes for Program goals**

Learning Outcome A: knowledge of the properties of construction materials and knowledge and skills in the use and application of construction materials commonly used in residential and commercial construction  
**Summative Assessment:** Average results from all learning outcomes in the courses listed below

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 101</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>90.28%</td>
<td>81.25%</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>10</td>
<td>9</td>
<td>8.125</td>
<td>90.28%</td>
<td>81.25%</td>
</tr>
</tbody>
</table>

Note that CONS 102 is a fall offering.

Learning Outcome B: understanding of the major components of the construction contract, bid process, laws and regulations governing the construction industry  
**Summative Assessment:** Average results from all learning outcomes in the courses listed below

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 150</td>
<td>6</td>
<td>6</td>
<td>5.6</td>
<td>93.33%</td>
<td>93.33%</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>6</td>
<td>6</td>
<td>5.6</td>
<td>93.33%</td>
<td>93.33%</td>
</tr>
</tbody>
</table>

Note that CONS 140 is a fall offering.

Learning Outcome C: ability to interpret construction graphics, specifications and other documents used for the construction, modification, and repair of buildings, and to communicate graphically when required  
**Summative Assessment:** Average results from all learning outcomes in the courses listed below

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 160</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>100.00%</td>
<td>66.67%</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>100.00%</td>
<td>66.67%</td>
</tr>
</tbody>
</table>

Note that TEED 171 is a fall offering.

Learning Outcome D: ability to prepare a complete estimate for a residential or commercial building to arrive at a profitable bid; and the ability to manage the project delivery process, including coordination of the diverse activities found in a construction project with planning, scheduling, and fiscal control  
**Summative Assessment:** Average results from all learning outcomes in the courses listed below

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 220</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>100.00%</td>
<td>90.00%</td>
</tr>
<tr>
<td>CONS 220L</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>100.00%</td>
<td>92.86%</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>20</td>
<td>18</td>
<td>18</td>
<td>100.00%</td>
<td>91.43%</td>
</tr>
</tbody>
</table>

Learning Outcome E: ability to communicate effectively with design consultants to manage changes and redirection of the project as required during the construction phase; and the ability to communicate effectively with project owner, colleagues and employees; and work efficiently and effectively with other construction personnel
Summative Assessment: Average results from all learning outcomes in the courses listed below

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 101</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>90.28%</td>
<td>81.25%</td>
</tr>
<tr>
<td>CONS 250</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>CONS 250L</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>24</strong></td>
<td><strong>23</strong></td>
<td><strong>22</strong></td>
<td><strong>96.20%</strong></td>
<td><strong>92.19%</strong></td>
</tr>
</tbody>
</table>

Note that CONS 102 is a fall offering.

Learning Outcome F: knowledge of fundamental skills of plan surveying

Summative Assessment: Average results from all learning outcomes in the courses listed below

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 210</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>100.00%</td>
<td>85.71%</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>7</strong></td>
<td><strong>6</strong></td>
<td><strong>6</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>85.71%</strong></td>
</tr>
</tbody>
</table>

Learning Outcome G: knowledge of the equilibrium mechanics of stationary bodies and the ability of a material to withstand an applied stress without failure

Summative Assessment: Average results from all learning outcomes in the courses listed below

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 101</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>90.28%</td>
<td>81.25%</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>10</strong></td>
<td><strong>9</strong></td>
<td><strong>8</strong></td>
<td><strong>90.28%</strong></td>
<td><strong>81.25%</strong></td>
</tr>
</tbody>
</table>

Note that CONS 230 is a fall offering.

Course    | 14-day count | Students Evaluated | Students Successful | Evaluated Student Success | Overall Student Success |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AASINSS</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>95.73%</td>
<td>84.55%</td>
</tr>
</tbody>
</table>

Faculty Reviewed August 16, 2012: Learning outcomes will need to be reviewed. The faculty will focus on recruitment to increase student enrollment.
<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 101</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>90.28%</td>
<td>81.25%</td>
</tr>
</tbody>
</table>

Faculty Reviewed August 16, 2012: Learning outcomes will need to be reworked based upon new edition of the text. Labs and field trips to demonstrate the principals learned in Cons 101 have time allotted within the laboratory hours for Cons 102, the continuation course. New advising system in LOLA will preclude and monitor persons who advise students into classes who do not meet the pre-reqs.

**Changes needed to improve student success.**
Hughens: n/a

**Changes needed to improve retention:**
Hughens: Students from this course generally continued to the second course in this series.

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 104</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Faculty Reviewed August 16, 2012: Student engagement will be improved via email correspondence and class discussion. Students from this course generally continued to the second course in this series.

**Changes needed to improve student success.**
Hughens: n/a

**Changes needed to improve retention:**
Hughens: None of the students in this program are returning in the fall to complete the certifications. Program should be fall/spring only.

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
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<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 106</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>50.00%</td>
<td>42.86%</td>
</tr>
</tbody>
</table>

Faculty Reviewed August 16, 2012: More hands-on projects will be incorporated for students to master the required skills.

Construction 104
Construction 106
Construction 160
Changes needed to improve student success:
Sonnier: Two students did not complete all assignments and for appropriate reasons were given a grade of Incomplete. Students must complete all work by Monday, March 12, 2012.

Changes needed to improve retention:
Sonnier: This course should be taught in full time allotted, not hybrid. Potential for an online course with imbedded AV lectures. Students do not "get" this material from simply reading the text. Lecture time in hybrid is not long enough to allow for thorough lectures for all materials.

Summary of results from all Learning Outcomes:

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 150</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>5.6</td>
<td>93.33%</td>
</tr>
</tbody>
</table>

Faculty Reviewed August 16, 2012: Student success was good even though the rigor of this course was significant for an eight week course. Plan to move towards an online/hybrid with embedded lectures. Will videotape the lectures.
Construction 160

Changes needed to improve student success:
Sonnier: This is a highly graphical course. The ability to make more models to demonstrate the principals would be the single best improvement to this course. Open lab time outside of class time could make that happen.

Changes needed to improve retention:
Sonnier: Student engagement in a course with graphical principals relies on a multi-sensory approach. Building models to demonstrate what students are learning could be a PBL solution to the retention in this course.

Summary of results from all Learning Outcomes:

<table>
<thead>
<tr>
<th>Course</th>
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<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 160</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>100.00%</td>
<td>66.67%</td>
</tr>
</tbody>
</table>

Faculty Reviewed August 16, 2012: The ability to have open lab time for Cons 160 students would be a very positive improvement for both success and retention.
Construction 205

Changes needed to improve student success:
Duplichan: more emphasis on math skills

Changes needed to improve retention:
Duplichan: no retention problems with this class

Summary of results from all Learning Outcomes:

<table>
<thead>
<tr>
<th>Course</th>
<th>14-day count</th>
<th>Students Evaluated</th>
<th>Students Successful</th>
<th>Evaluated Student Success</th>
<th>Overall Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS 205</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Faculty Reviewed August 16, 2012: This is a hands-on course in large part, and construction students tend to attend these types of courses.
Construction 210

Changes needed to improve student success:
French: no comment
### Faculty Reviewed August 16, 2012:

**Course:** CONS 250
- **14-day count:** 7
- **Students Evaluated:** 7
- **Students Successful:** 7
- **Evaluated Student Success:** 100%
- **Overall Student Success:** 100%

**Changes needed to improve student success:**
- Matkins: No comment

**Changes needed to improve retention:**
- Matkins: No comment

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**Course:** CONS 250L
- **14-day count:** 7
- **Students Evaluated:** 7
- **Students Successful:** 7
- **Evaluated Student Success:** 100%
- **Overall Student Success:** 100%

**Changes needed to improve student success:**
- Construction: No comment

**Changes needed to improve retention:**
- Construction: No comment

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**Course:** CONS 280
- **14-day count:** 3
- **Students Evaluated:** 3
- **Students Successful:** 3
- **Evaluated Student Success:** 100%
- **Overall Student Success:** 100%

**Faculty Reviewed August 16, 2012:**

- This course should always have high retention since it is followed by graduation.

**Changes needed to improve student success:**
- Engineering: Develop more hands on examples in antilizing problems.

**Changes needed to improve retention:**
- Engineering: Instructor needs to be aware of the work force for students.