# **DIVISION OF ENGINEERING TECHNOLOGIES**

#### Mission

The Engineering Technologies Division provides collegiate level degree programs, transfer programs and continuing educations courses in technical areas. These programs will prepare students to work in an increasingly technological work force and focus on student learning outcomes.

## Vision

The Engineering Technologies Division will provide leadership in technologies programs at the highest possible level and move toward stand alone Bachelor of Science degree programs in technical areas.

### **Core Values**

**Excellence-**We seek excellence in all our endeavors and we are committed to continuous improvement.

**Intellectual Freedom-** We believe in ethical and scholarly questioning in an environment that respects the rights of all to freely pursue knowledge.

**Diversity-**We respect others and value diversity of opinions, freedom of expression, and other ethnic and cultural backgrounds.

**Integrity-**We are committed to the principles of truth and honesty, and we will be equitable, ethical, and professional.

**Service** – We believe that serving others is a noble and worthy endeavor.

**Stewardship of Resources-** We are dedicated to the efficient and effective use of resources. We accept the responsibility of the public's trust and are accountable for our actions.

# Goals, Critical Success Factors, Objective, and Strategies

Goal One. Continue to provide the highest level of instructional quality in engineering technology classes and expect academic excellence from a diverse student body.

#### **Critical Success Factors:**

- Reduce the number of courses taught by adjunct to full time faculty below the current 2:1 ratio in Engineering Technologies
- Reduce the adjunct to full time faculty ratio below the current 6.13:1 in Engineering Technologies
- Increase the number of full time faculty members by 5
- Increase the diversity of the students enrolled in Engineering Technology by 10 % and work to increase the diversity of the faculty
- Utilize the assessment plan with all faculty members to improve the overall quality of the courses, the curriculum and the overall educational experience for the students
- All engineering technology faculty participate in the Student Evaluation Process
- All engineering technology faculty participate in the Merit Appraisal Process

*Objective 1.1:* Develop a plan to increase the number and diversity of full time faculty members in the Engineering Technologies Division and provide the highest quality of adjunct instructors.

## Strategies:

- Develop a plan showing the need for additional Department Heads for the Engineering Technology Division.
- Develop a needs analysis showing a need for at least one full time faculty member for each of the academic degree offerings within the Division of Engineering Technologies.
- Recruit the best faculty, full time and adjuncts, to enhance the program and provide a diversity of experiences for the students.

**Objective 1.2:** Establish a means to use the results of the outcome assessments with all faculty members.

- Share the results of the exit interview with all appropriate faculty members.
- Develop of forum for all faculty members to the assessment data and determine how it can be use to improve the courses, the curriculum and the program.
- Work with institutional research in collecting the appropriate date to be used by the division.
- Require all faculty members to participate in the Student Evaluation of Instruction process.
- Require all faculty members to participate in the annual Merit Appraisal process.

**Objective 1.3:** Establish a methodology to promote the Division of Engineering Technology to a wide diverse population.

- Work with the High School and College relations department to insure they understand the curriculums in Engineering Technology and to present the programs to under-represented populations.
- Continue to work with the Hispanic Recruiter to take the message of the Engineering Technology programs into the Hispanic community in Oklahoma City.
- Continue to participate in the annual Engineering Fair at the Omniplex and promote the Engineering Technology programs to high schools students from across the state.
- Continue to expand the industrial trade show exhibits, Oklahoma Society of Land Surveyors, Locke Trade show, to promote the Engineering Technology Division to the working adult population.
- Work with the City of Oklahoma City inspection division to develop the image of Oklahoma State University Oklahoma City Engineering Technology as a leader for upgrade training for the trades.
- Develop grant applications for student educational programs that promote the Engineering Technology programs and expose students to possible career opportunities in Engineering Technologies.
- Develop and engineering forum for exposing our students and the public to new ideas and concepts in all aspect of engineering.

Goal Two. Provide faculty/staff development for both full-time and adjuncts that will enhance the quality of the classroom/lab instruction that encourages a focus on student learning, creative activities and economic development.

#### **Critical Success Factors:**

- Provide an off campus faculty development activity for each full time faculty members at least once every 2 years
- Provide in-service training available for all Engineering Technology faculty members, full time and part time, every 2 years
- Request involvement of Academic Technologies in training opportunities for the entire Engineering Technology faculty and staff
- 100 % of Faculty and staff participating in institutional development activities
- Provide on opportunity for all staff to participate in an off campus development activity at least once every 2 years
- Encourage all faculty members to be active in their local, state and national organizations and to make professional presentations to these groups

**Objective 2.1:** Develop a plan for in-service training on current topics and new instructional techniques for all Engineering Technology faculty/staff members.

### Strategies:

- Develop a schedule for the full time faculty showing whose opportunity for travel would be available each year.
- Develop in-house training objectives for the Engineering Technologies Division.
- Identify topics that the faculty/staff would like to have training on.
- Establish a time line for training and set goals for the training sessions.

**Objective 2.2:** Provide input to the Academic Technology staff regarding specific training needs for the Engineering Technology faculty and staff.

- Determine what technology courses would be best suited for distance delivery and develop a time line to get the courses implement.
- Determine which faculty members are willing to put their courses on-line and work with Academic Technology and the faculty to get their courses developed for on-line delivery.
- Provide basic training opportunities for staff in Blackboard so they may support the faculty as on-line courses are developed.
- Develop a marking plan with Academic Technology, and Public Relations office to get courses that are developed marketed across the state and nation increasing the economic impact of our on campus courses.

Goal Three. Provide state of the art equipment for each of the technical programs so student learning will be readily transferable to the workforce, increase the creative activities of the faculty and provide additional educational opportunities for the students.

#### **Critical Success Factors:**

- Add at least 1 new piece of laboratory equipment, in quantities for teaching a lab, to each of the major degree areas every 2 years
- Develop new laboratory experiment based on the new equipment and implement the new equipment into the classroom/laboratory settings
- Provide 5 short course educational opportunities to our students and the local workforce, highlighting our labs, educational opportunities and faculty expertise
- Provide lab access to all critical laboratories for students during off hours of building operation

**Objective 3.1:** Develop a methodology to determine which programs need equipment each year and how the equipment may be obtained.

## Strategies:

- Identify special equipment that should be purchased with matching Continuing Education funds.
- Prepare Grant proposal to leverage our dollars for special "high dollar' equipment that our budgets alone do not allow us to buy, but would benefit the programs and the division.
- Develop a divisional list of priorities of equipment and identify possible sources of funding; equipment budget, Perkins funds, outside sources and update the list each year.

*Objective* 3.2: *Implement the new equipment into the labs, develop labs around the new equipment and provide access for the students at times after normal hours of building operation.* 

- Require the professor whose is responsible for the piece of equipment to provide the division office with a copy of the labs that make use of the new equipment or a plan for implementing the equipment into the lab.
- Inform the advisory board, adjuncts and all other faculty and staff of the new equipment and the capabilities of the equipment and provide a demonstration of the equipment as needed.
- Provide information on the new equipment to the Public Relations department for a possible news release and story.
- Survey students to determine how they are actually using the new equipment and determine their level of satisfaction with the labs.
- Provide special training sessions for the students on the new equipment.

• Provide swipe card access to the labs and/or provide lab monitors for evening and weekend access to the critical labs.

Goal Four. Evaluate current programs and explore new programs and courses to meet current and future workforce requirements.

#### **Critical Success Factors:**

- Review two programs each year for curriculum changes required, new courses required in the curriculum, and any other required curriculum revisions
- Explore the additions of two new programs

**Objective 4.1:** Develop a methodology to evaluate new program offerings and courses and determine how to implement the ideas into new programs or revised curriculums.

- Have an advisory board meeting once a year to review the curriculums and evaluate the program by industry leaders.
- Meet with local industries at least once a year to explore possible new programs and or course offerings.
- Meet with Engineering Technology faculty and adjuncts once each year to review the programs and the curriculum.
- Establish a faculty committee to review new programs.

Goal Five. Continue to provide education opportunities to meet the requirements of the local workforce.

#### **Critical Success Factors:**

- Provide 5 new in house educational opportunities for the local workforce
- Develop 5 educational partnerships with local organizations to provide cooperative educational opportunities for their employees and our students
- Encourage all Engineering Technology faculty and staff to work with the new office of Continuing Education to provide new educational opportunities for the community

*Objective 5.1:* Develop a marketing plan with the Continuing Education staff for the course offerings in the Engineering Technology Area.

- Meet with city and local governing agencies on the need for specialized training for the trades industry.
- Develop a marketing plan to promote our Continuing Education programs to the right audiences in cooperation with the Continuing Education office.
- Meet with local technical professions to determine what type of Continuing Education activities are required for their industries and for professional development in their professions.
- Work with the Continuing Education office to promote the visibility of the Engineering Technology Division and their capabilities, their offerings, and their students to industries in the state.
- Have a joint meeting between the Continuing Education staff and the Engineering Technology staff to explore new training opportunities.