

Oklahoma City Community College
Program Review Self Study 2008-2009
Program: Electronics
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Division: Business

I. Program Requirements

1. Program Curriculum

Date:

Name of Program: Electronics-General

Semester Hours General Education: 18

Semester Hours in Major: 32

Semester Hours Support: 10

Semester Hours Electives:

Semester Hours Life Skills: 1

Semester Hours Total: 61

Freshman Year First Semester			
Prefix	Number	Course	Credit Hours
SCL	1001	Success In College And Life	1
ENGL	1113	English Compositiion I	3
ET	1014	D.C./A.C. Fundamentals	4
ET	1544	Electronic Shop Practices	4
MATH1		Mathematics That Meet Occc's Mathematics Proficiency	3
		Total	15

Freshman Year Second Semester			
Prefix	Number	Course	Credit Hours
ET	1114	Solid State Circuits	4
ET	1124	Digital Logi Fundamentals	4
HIST	1483	U.S. History To The Civil War Or	
HIST	1493	U.S. History Since The Civial War	3
OSRHE1		OSRHE Approved General Education Communications Or English Course	3
GENED		General Education Elective	3
		Total	17

Sophomore Year First Semester			
Prefix	Number	Course	Credit Hours
FAMAJOR		Faculty Approved Major Elective	4
ET	2334	Digital Logic Systems	4
GENED		General Edcaution Elective	3
SUPP		Faculty Approved Support	3
POLSC	1113	American Federal Government	3
		Total	17

Sophomore Year Second Semester			
Prefix	Number	Course	Credit Hours
ET	2384	Operational Amplifiers	4
ET	2024	Communication Systems	4
SUPP		Faculty Approved Support	4
		Total	12

CURRICULUM LISTINGS

Major Courses	Credit Hours
ET 1014 D.C./A.C. FUNDAMENTALS	4
ET 1114 SOLID STATE CIRCUITS	4
ET 1124 DIGITAL LOGIC FUNDAMENTALS	4
ET 1544 ELECTROINC SHOP PRACTICES	4
ET 2334 DIGITAL LOGIC SYSTEMS	4
ET 2384 OPERATIONAL AMPLIFIERS	4
ET 2024 COMMUNICATION SYSTEMS	4
MAJOR ELECTIVES	4
Total	32

General Education Courses	Credit Hours
ENGL 1113 ENGLISH COMPOSITION I	3
OSRHE GENERAL EDUCATION COMMUNICATIONS OR ENGLISH COURSE	3
POLSC 1113 AMERICAN FEDERAL GOVERNMENT	3
HIST 1483 U.S. HISTORY TO THE CIVIL WAR OR	
HIST 1493 U.S. HISTORY SINCE THE CIVIL WAR	3
GENERAL EDUCATION ELECTIVES	6
Total	18

Support Courses	Credit Hours
OCCC MATHEMATICS COURSE THAT MEET OCCC MATHEMATICS PROFICIENCY	3
FACULTY APPROVED SUPPORT ELECTIVES	7
Total	10

Life Skills Courses	Credit Hours
SCL 1001 SUCCESS IN COLLEGE AND LIFE	1
Total	1

Total Credit Hours 61

I. Program Requirements

1. Program Curriculum

Date:

Name of Program: Electronics-Instrumentation and Control

Semester Hours General Education: 18

Semester Hours in Major: 32

Semester Hours Support: 10

Semester Hours Electives:

Semester Hours Life Skills: 1

Semester Hours Total: 61

Freshman Year First Semester			
Prefix	Number	Course	Credit Hours
SCL	1001	Success In College And Life	1
ENGL	1113	English Composition I	3
ET	2353	Instrumentation And Control I	3
ET	1144	Industrial Electronics	4
ET	1223	Digital Electronics	3
		Total	14

Freshman Year Second Semester			
Prefix	Number	Course	Credit Hours
ET	2014	Control Devices	4
ET	2044	Electromechanical Devices	4
ET	2363	Instrumentation And Control I	3
OSRHE1		Osrhe Approved General Education Communications Or English Course	3
MATH1		Mathematics That Meet Occc's Mathematics Proficiency	3
		Total	17

Sophomore Year First Semester			
Prefix	Number	Course	Credit Hours
ET	2124	Control Systems	4
PRDT	1534	Programmable Controller Programming	4
PRDT	1413	Fluid Power	3
POLSC	1113	American Federal Government	3
SUPP		Guided Support Elective	4
		Total	18

Sophomore Year Second Semester			
Prefix	Number	Course	Credit Hours
HIST	1483	U.S. History To The Civil War Or	
HIST	1493	U.S. History Since The Civil War	3
GENED		General Education Elective(S)	6
SUPP		Guided Support Elective	3
		Total	12

CURRICULUM LISTINGS

Major Courses	Credit Hours
ET 1144 INDUSTRIAL ELECTRONICS	4
ET 1223 DIGITAL ELECTRONICS	3
ET 2014 CONTROL DEVICES	4
ET 2044 ELECTROMECHANICAL DEVICES	4
ET 2124 CONTROL SYSTEMS	4
ET 2353 INSTRUMENTATION AND CONTROL I	3
ET 2363 INSTRUMENTATION AND CONTROL II	3
PRDT 1413 FLUID POWER	3
PRDT 1534 PROGRAMMABLE CONTROLLER PROGRAMMING	4
Total	32

General Education Courses	Credit Hours
ENGL 1113 ENGLISH COMPOSITION I	3
OSRHE GENERAL EDUCATION COMMUNICATIONS OR ENGLISH COURSE	3
POLSC 1113 AMERICAN FEDERAL GOVERNMENT	3
HIST 1483 U.S. HISTORY TO THE CIVIL WAR OR	
HIST 1493 U.S. HISTORY SINCE THE CIVIL WAR	3
GENERAL EDUCATION ELECTIVES	6
Total	18

Support Courses	Credit Hours
MATHEMATICS THAT MEET OCCC'S MATHEMATICS PROFICIENCY	3
GUIDED SUPPORT ELECTIVES	7
Total	10

Life Skills Courses	Credit Hours
SCL 1001 SUCCESS IN COLLEGE AND LIFE	1
Total	1

Total Credit Hours 61

2. General description of review process and participants assisting with and conducting the review.

- a. Program faculty assess annually student learning and program outcomes for their program. Every five years these assessments are evaluated globally. A program review document contains general college information from Advising, Recruitment and Admission and Institutional Effectiveness and program specific assessments of strengths and weakness of the reviewed program and program plans for the future.

b. A list of the student learning outcomes

General Emphasis

Demonstrate knowledge of principles by solving problems relating to both DC and AC in subjects such as resistive circuits, reactance impedance, AC circuits and resonance.

Demonstrate and solve problems relating to various solid state devices and associated circuits such as diodes, transistors, F.E.T.'s power supplies, filters, regulators, and amplifiers.

Demonstrate digital logic fundamentals by applying digital devices in a laboratory setting and by solving problems related to circuit theory, number systems, and Boolean algebra. Specific devices included are basic gates, combination logic, flip-flops and MSI devices.

Use hand tools to construct, solder and desolder electrical circuitry. In addition, the student will use electronic measuring instruments such as oscilloscopes, multimeters, and function generators to measure and record voltages, currents, frequencies, resistances, and other circuit values.

Analyze electronic circuits associated with amplitude modulation, frequency modulation, transmission lines, antennas and fiber optics.

Apply digital fundamentals to the design of logic systems such as counters, arithmetic circuits, memory circuits, analog/digital converters, digital/analog converters, and microprocessors.

Apply basic electronic principles to solve problems concerning operational amplifier specifications and applications inverting and non-inverting amplifiers, summing circuits, differential amplifiers, integrators, differentiators, and other waveshaping circuits.

Use microprocessors and support devices to evaluate microcontrollers and support device to evaluate microcontroller applications related to the electronics industry. Microcontroller drive capabilities related to input/output interfacing, programming, motion control, A/D and D/A conversions, and embedded controller applications will be analyzed and tested.

Instrumentation and Control

Demonstrate knowledge of basic industrial electronic principles and devices

by solving problems and constructing lab experiments in subjects such as resistive circuits, Ohms law and power, series and parallel circuits, DC and AC circuits, solid state circuits and devices, and operational amplifiers.

Analyze, construct, test and interface fundamental digital circuits including logic gates, combinational logic circuits, Flip-flops, counters, encoders and decoders, shift registers arithmetic circuits, digital to analog conversions, and analog to digital conversions.

Demonstrate characteristics of industrial control devices.

Demonstrate problem maintenance and troubleshooting procedures on various types of electrical motors and electromechanical systems.

Demonstrate the characteristics of an industrial control system consisting of transmitters, controllers, control valves, and transducers.

Demonstrate system operations by proper measurement and control techniques of flow, pressure, temperature and level control with the system.

Demonstrate pneumatic logic components within a pneumatic system and integrate each component into a control loop.

Use hydraulic pumps and motors and make hydraulic connections, measurements, and calculations.

Demonstrate the operation of a programmable controller by writing a program to control on-delay and off-delay timers, test the program for correct, operation and apply troubleshooting techniques as necessary.

c. A list of program outcomes for the program

General Emphasis: Graduates of the Electronics-General Program will be prepared for the workforce with the skills and education necessary by today's industry standards.

Instrumentation and Control: Graduates of the Electronics-Instrumentation and Control Program will be prepared for the workforce with the skills and education necessary by today's industry standards.

d. Well defined the criteria for measurement and how the criteria were used in the program.

Student must achieve successful course completion at a rate of 80% or greater for a specific course selected by the program faculty and industry led program advisory board. Material covered in the course directly relates to industry standards of employability.

The program competencies are aligned with industry standards to provide students with education and skills to be successfully employed upon completion of the program. The program is measured by the successful positive placement (75%) of graduates into a related field, military service or related continuing education.

Program and Student Outcomes are assessed annually to ensure relevant and pertinent course content is maintained in the program. In addition, industry-led program advisory committees meet each regular semester (fall/spring) to review course materials, labs/equipment, and to provide information concerning future trends within the industry to ensure the program stays current with emerging technologies related to the industry.

e. The evaluation, results and recommendations based on the criteria used.

Each year the program(s) is assessed based on select criteria for student and program evaluation. Annual monitoring of the program provides current and relevant information concerning student success and industry related placement. Information gathered during this process allows the faculty and the industry led program advisory board to address any concerns that may arise during the evaluation process. These may include updating course content with new and relevant material, explore emerging technologies within the industry, or change the degree completion requirements based on employability standards within the industry.

For the last four years the program has met or exceeded the success criteria for both student and program outcomes.

2. Research and evaluation must be conducted on a continuing, systematic basis as an integral part of the program. All aspects of the program must be evaluated and the results used to improve services to students. There must be evidence that the program is reaching its stated student learning

outcomes/program outcomes. The review should address each of the following areas. The program:

- a. is central to the institution's mission:

According to the annual Student Follow-up Survey data, seventy-five percent of the students are employed in the field of study after one year of completion of the program.

The advisory committee, consisting of industry, student and academic representatives will meet a minimum of twice annually. Input from them will be solicited regarding curriculum, equipment, and other factors related to the program and students' performance.

Seventy-five percent of the students who have declared their major in this area will be retained for program completion, achieve program completion or achieve occupational completion after the first year of entering the program.

*Student Follow-up Survey is conducting by the technology center faculty 6 months to a year after students complete the program.

- b. meets stakeholder expectations:**

OCCC programs provide our community with broad equitable access to a college education. OCCC students are prepared to succeed in college and are able to achieve their individual educational aspirations. OCCC graduates succeed at four-year institutions and/or in their careers. OCCC has a rich history of enriching our community both economically and socially through our educational and cultural programs.

- c. produces graduates and former students who are successful on transferring:

This program is a terminal program designed to prepare graduates to enter the workforce.

- d. contains instruction relevant to the curricular requirements at transfer institutions and in line with student interests and abilities

Programs of Study

OCCC offers two types of associate degree programs: transfer and technical/occupational. In addition, a number of certificates of mastery are offered in technical and occupational fields of study.

University Parallel/Transfer Programs

OCCC offers a broad range of transfer programs for students planning to continue on at a four-year college or university. Students may enroll in freshman and sophomore courses which lead to a baccalaureate degree in practically any field of study. Upon completion of specified degree requirements, the student is awarded an Associate in Arts or Associate in Science. These degrees require the completion of a minimum of 60 semester credit hours. Of the 60 semester credit hours, a minimum of 37 must satisfy the general education core requirements (see Degree Requirements). The remaining approved courses will be related to the student's major or courses which directly support that major.

Policy Statement on Undergraduate Degree Requirements and Articulation

In accordance with the Oklahoma State Regents for Higher Education Policy Statement on Undergraduate Degree Requirements and Articulation, a student who completes an Associate in Arts or an Associate in Science degree at OCCC "may transfer into a Bachelor of Arts or a Bachelor of Science degree program at any senior institution of the State System and be assured of completing his or her program in sequential fashion." The Policy Statement on Undergraduate Degree Requirements and Articulation assures that the general education core (37 credit hours) of the Associate in Arts or Associate in Science degree at OCCC will apply directly toward the lower division general education requirements at any state university in Oklahoma. In addition, students are advised to secure the official catalog of the university to which they plan to transfer. Each university's official catalog provides pertinent information about admission policies and academic programs. That information is essential to the student's successful transfer to that university. Students should also consult a faculty advisor in their major at OCCC. With approval, the associate degree program may be modified to meet a student's needs depending on the intended transfer college or university.

Students are encouraged to visit the "Transfer Center" on the Oklahoma State Regents for Higher Education web site at <http://www.okhighered.org/studentcenter/transfer-stdnts>. This site will assist a student in determining which course or courses will transfer to another Oklahoma college or university.

Transfer guides showing course-by-course articulation between OCCC and a number of state universities are available in Office of Academic Advising. By using the appropriate transfer guide, the student can be assured that courses in the student's major will transfer directly toward the bachelor's degree.

OCCC has established specific curriculum patterns for transfer programs leading to the Associate in Arts (A.A.) or Associate in Science (A.S.) degrees. The curriculum patterns listed below are presented in the next section of the Catalog.

e. **Have systems to evaluate courses and faculty by students, administrators, and departmental personnel**

Faculty Performance Review and Evaluation

Faculty will be evaluated on the basis of the established standards of performance and objectives established in the person's contract and any subsequent memorandums of agreement established for the position/person. Faculty are defined as employees who primarily perform teaching and instruction-related duties and who are employed on the basis of a written contract setting forth the duties to be performed and the compensation to be paid. The performance appraisal for each faculty member will be conducted by the Division Dean or Director as appropriate. In preparation for the review, the employee will provide relevant information to the Division Dean or Director as appropriate at least two working days prior to the evaluation conference. The results of the subsequent performance appraisal conference will be documented on a rating sheet signed by both the employee and the Division Dean or Director as appropriate.

Course and Faculty Evaluation

The Student Input on Instruction form is a means of gathering student perceptions of instruction at the college. The results are intended for use by you and your dean in identifying ways to improve instruction. A copy of the form is in the appendix of this document. The forms and supportive instructions will be distributed for you to administer during the 8th, 9th, or 10th week of 16-week courses or the 5th or 6th week of eight-week courses. Prior to administering the instrument, you should:

1. Plan class time to help ensure that time is available for completing the forms.
2. Where desirable, prepare up to three (3) questions, which are unique to the course or section for inclusion as the optional questions on the form. You should have multiple copies of these questions printed for use by the students.
3. Select a student to be responsible for administering and returning the forms and brief him or her about the process. It is best to keep

the forms and instructions in your possession until the day you plan to administer them. Your cooperation in helping to ensure that the Student Input on Instruction forms are completed in a timely manner will go a long way to provide useful student input concerning your instructional methods.

- f. is staffed, administered, and supplied to provide for the development of competent students in all areas including citizenship and social conscience**

Service-Learning

Incorporating service-learning as a part of your curriculum is easy to do and can enhance students' ability to understand and apply course material. Service-learning can also generally be used as a part of any course's learning objectives. Office of Student Life coordinates student involvement in service learning.

- g. Has current, appropriate, useful, and sufficiently comprehensive instructional media and materials.**

The program utilizes state-of-the-art equipment and software. In addition, faculty use a variety of instructional media materials in the delivery of educational experiences. These include multimedia services, library/resource books and periodicals specific to the program, learning labs, job shadowing and lectures.

- h. Provides adequate resources and adequate and appropriate faculty whose qualifications (including educational background, related experience, and service contributions related to the program) support the objectives and curriculum of the program.**

All technical/occupational programs employ state-of -the art equipment for the labs, have adequate funding sources to maintain equipement and instrcutional materials as well as provide multiple instructional mediums to assist students through the learning process. These include but are not limited to lecture, online examples of lab assignments, video tutorials, workbooks, text/software and study groups. Faculty teaching as a part of the degree programs offered cooperatively with Francis Tuttle, Moore Norman and Metro Tech Technology Centers, must adhere to the same qualifications as other Oklahoma City Community College faculty. All program faculty hold the appropriate degree, industry related certification, and have adequate industry related experience.

- 3. Evidence should be presented that shows a systematic review of the curriculum is conducted regularly. This review should indicate how the general education competencies are being met:**

General Education Assessment Plan

Objective:

To assess and recommend actions for the general education component of Oklahoma City Community College's curriculum.

Strategy:

The General Education Committee will create six interdisciplinary teams with members from multiple divisions. Each team will consist of five members with two members specifically teaching in one of the General Education Core Areas. Also, at least one team member will be a representative of the General Education Committee.

Twice a year these teams will evaluate one hundred artifacts from students having attained at least 30 hours of General Education Courses from OCCC. During each Spring Semester, the reports from each team will be shared at the meeting of the whole General Education Committee and dispersed to faculty within each division. Specifically, during the Fall Semester, each team in charge of a specific Student Learning Outcome area will make curriculum recommendations to the General Education Committee. Reports, recommendations, and actions created from the General Education Assessment Process will be stored on the General Education Committee Website. Faculty members on each team will be compensated each semester.

Method:

Developed rubrics will provide common criteria for assessing “artifacts” gathered from various courses. Artifacts may include but are not limited to recorded performances, PowerPoint Presentations, essays, lab reports, research projects, service-learning projects, or any assignment preexisting in a faculty's course. However, the artifacts should adhere to the specific objectives of the Student Learning Outcomes established by the General Education component of OCCC's curriculum.

Nevertheless, the underlying principle of this method is (1) to reduce the intrusive nature of assessment within faculty courses, (2) to create a real environment of

student performances within a classroom setting instead of a contrived environment of a forced examination (i.e. CAAP exams not counting for a classroom grade), and (3) to collect artifacts already designed and administered by our professional faculty at OCCC.

Data Collection:

The Office of Institutional Effectiveness will identify each semester students completing at least 30 credit hours in General Education Courses. From this list, they will identify a random sampling of students enrolled in courses, which faculty have included “artifacts” relating to the Student Learning Outcomes measured each semester.

For example, if an outcome in Math is measured, then the following courses beyond a Math Prefix could also be used: Introduction to Logic, Business Statistics, Behavioral Statistics, Chemistry, Physics, Accounting, Physical Science, or other General Education Courses involving Math and including the objectives for the Math Student Learning Outcome. Likewise, data collection could be attained from an outcome in Writing from any course involving writing, including a scientific lab report, as long as it adheres to the objectives of the Writing Student Learning Outcome for the General Education curriculum.

The premise behind this kind of data collection (1) allows for an interdisciplinary approach to the General Education curriculum; (2) creates a shared vision of faculty collaboration beyond the microcosm of specific divisions; (3) allows for a more accurate depiction of student learning as they progress from one General Education Course to the next; and (4) creates a shared approach to improve student learning and success by reiterating General Education Skills from multiple courses.

4. Provide a summary of how concerns and recommendations identified in the last program review were addressed.

Concern: Many courses have reached capacity and have waiting lists.

Recommendation: Offer courses at different times and days of the week.

Since the last program review, technology center partners have begun offering courses on Saturdays and in the evening. This has enabled all students interested in this program to be accommodated.

5. Describe the strengths of the program identified through this review.

Facilities provide up-to-date environment for student learning.

A strong, well represented industry-led advisory committee.

Adequate financial resources.

Instructors not only have academic credentials, but also strong business and industry experience.

Curriculum is kept current for the current and future work force.

Partnership between Oklahoma City Community College and Francis Tuttle, Moore Norman and Metro Tech Technology Centers enables students to complete their associate in Applied Science degree with little financial resources required from the College.

High percentage of job placement and starting salaries.

6. Describe the concerns regarding the program that have been identified through this review.

Educating the public about career opportunities in electronics and fields related to the electronics industry.

Limited or slow industry expansion within the OKC and surrounding areas.

7. Develop a list of recommendations for action that addresses each of the identified concerns and identify planned actions to implement recommendations.

Develop a communications structure to begin awareness of careers in electronics at the secondary and adult levels. This will involve our technology center partners and include marketing materials as well as informational session for students demonstrating an interest in this area of study.

We have begun to work with small and medium companies to identify their needs and will update/modify the degree program as necessary to meet the needs and challenges of the industry.

Have begun the process of bringing in representatives from emerging technologies, wind energy, fiber optics, etc. as additional industry resources.

I. Institutional Requirements

1. Provide factual and accurate documentation which demonstrates acceptable standards of ethics in recruiting and advertising activities.

All materials provided to students are thoroughly reviewed by appropriate personnel to ensure they are factual and accurate. In addition, appropriate personnel review all recruiting and advertising activities to ensure they meet acceptable standards of ethics. Prospective students may access information about the college and its programs through the Office of Recruitment and Admissions.

Services provided by this office include campus tours, community and high school outreach, information sessions, scholarship programs and corporate recruiting. College information is provided to students through traditional means such as class schedules, catalogs, student handbooks, Recruiters Manual, and new student orientation as well as through the College website.

2. Provide recruitment and admission policies and practices reflecting that the program is available to qualified applicants and that qualified applicants will be admitted regardless of sex, race, ethnic background, religious preference, disability or any disadvantage.

Recruitment practices and activities are planned and reviewed by appropriate personnel to ensure the institution's vision, mission, and ENDS are met. Every effort is made to ensure that all qualified prospective students are contacted and provided with opportunities to be informed about College programs, services and courses and are provided with the opportunity to apply for admission to the College.

Students entering Oklahoma City Community College as a Regular Degree Seeking Student will meet the following admissions requirements:

- graduated from high school or earned a GED;
- completed the ACT, SAT or a similar acceptable battery of tests; and
- completed all high school curricular requirements.

Students who do not meet the above criteria may be admitted under one of seven Special Admission Categories outlined in the Catalog. All students who meet the above requirements or who fall into one of the special admissions

categories are admitted without regard to sex, race, ethnic background, disability or disadvantage.

- 3. Provide documentation that an organized, coordinated program of guidance and counseling exists. The program should foster maximum development of individual potential by providing institution-wide assistance in the choices, decisions, and adjustments that individuals must make to move through a program.**

Faculty from each program work very closely with the Student Development Center staff. Each student is encouraged to have a counselor from Student Development as well as a faculty advisor.

Degree sheets are available in the Student Development Center as well as in faculty advisors' offices. Students may also access degree requirements and complete an up-to-date degree audit online. Faculty advisors work closely with Student Development Counselors to minimize the number of hours unable to be counted when a student transfers to a four-year institution.

The general philosophy and objectives of the Student Development Center include informational, relational and conceptual processing of educational planning and student goal achievement, including degree completion, articulation or personal development and apply to all students.

The functions of Student Development are stated in the College's Policies and Procedures Manuals and in the Catalog for the benefit of all students, faculty, and staff. Student Development objectives are also outlined in the above mentioned documents.

Counselors follow guidelines listed below in working with students. After admission to the College, a student is evaluated for placement. After the evaluation is complete, the student meets with a counselor to determine enrollment. Course selections are based on test scores, anticipated program and required courses, workload, possible transfer and past academic history. If the student expresses indecision over goals, especially for career or program choice, they explore them with a counselor in Student Development.

When a student indicates a desire to pursue a specific program, they are referred to the appropriate faculty advisor or program director. An individual strategy is built for each student, designating courses to be enrolled in for each semester.

Counselors in the office of Student Development are available to discuss career objectives and degree programs with each student. The staff of Student

Development assists all students with educational planning, career decisions, and occupational choices. Further assistance is available in conjunction with the Discover Program and the other resources of the Career Counselor.

Academic Advisement (faculty handbook)

In the course of interacting with students, it is the responsibility of faculty members to serve as academic advisors. In addition, faculty give advice on a broad range of topics and issues. The kinds of advice offered by faculty can be categorized in the following way.*

* It is important to underscore that this listing is intended to be suggestive rather than exhaustive or prescriptive.

Program Requirements

It is important for students to meet with an advisement professional to establish a Student Academic Plan (SAP). Returning students who are familiar with their degree requirements and those not seeking a degree or certificate may self advise. Students are also encouraged to work concurrently with their faculty advisor in the academic discipline of their degree choice. A faculty advisor can help ensure that major specific educational objectives are met in an efficient, orderly fashion. If you have questions on course selection, entry-level skills required or general academic information contact Office of Academic Advising. With respect to program requirements, faculty advisement may address such things as degree planning (timing and sequencing of courses), identifying the appropriate catalog (degree plan to follow), selecting support electives, and meeting special requirements for a program or student (e.g., clinical performance, immunization, CPR).

Transfer Concerns

Relative to transfer concerns, faculty advisement may include such things as providing information on programs at area transfer institutions, information on out of state/state institutions, and transfer procedures to those institutions. It may also include evaluation of course content of major courses being transferred in for a particular major.

Career Information

Providing career information may include information about employment opportunities with various levels of education and responding to questions regarding how to select a path to follow within the field.

Referral

Referral may be done when faculty advice is sought on such matters as financial aid, transportation problems, problems with transcripts, formal degree checks, personal problems requiring counseling, graduation procedures, or any issue that the faculty member determines can be best served by others.

4. **Provide documentation that reflects accurate and complete cumulative records of educational accomplishment including:**

- a. **The number of majors (head count and FTE) in the instructional program during each of the last three years and projections for the next two years.**

The program major totals vary each year due to graduation, matriculation and stop out.

- b. **the size of specialized (program major) classes, if any, identified as integral elements in the program during the last three years.**

Technical/occupational specific courses average in size from 18-25 due to lab capacity limitations.

- c. **Instructional cost, including efficiencies and improved learner outcomes achieved through the use of any technology.**

OCCC is committed to providing quality education at times and places most convenient to students. To accomplish this, Distributed Learning Instructional Technology has developed courses which offer several options to students who cannot attend on-campus courses. Those options are online courses, telecourses, interactive television and web-enhanced courses. In addition to providing access Distributed Learning assist faculty in their utilization of technology to enhance student learning by providing software and technology training. Camtasia Software (used for the development of narrated online lectures and tutorials), Avacast (a webcasting software), learning management system (WebCT) license, Podcast studio remodel and setup, equipment and software, and Thinkwave licenses (an online grade book) are among the tools available at the cost of \$71,219.

- d. **The number of FTE faculty in specialized (program major) courses within the curriculum**

The program has adequate faculty to meet the needs of the students and provide excellent instruction.

e. Projected job market for graduates in occupational programs during the next two years.

Although current economic challenges have dramatically affected today's job market, graduates of the Electronics program are and will continue to be in demand to replace an aging workforce in this field.

f. The success of transfer students based on GPA comparisons.

This program is a terminal program designed to prepare graduates to enter the workforce.

5. Provide documentation that a process exists to insure that cumulative records of educational accomplishment are securely and permanently maintained for every student, and transcripts are issued upon student request.

The Registrar's Office establishes an official record for each student admitted to the college. Cumulative academic records are maintained and archived in compliance with all federal and state requirements and in accordance with American Association of Collegiate Registrars and Admissions Officers (AACRAO) recommendations.

The College complies with the Federal Rights to Privacy Act of 1974, as amended, regarding record integrity, security, access, and the release of Directory Information. Transcripts are issued directly to the student upon request and at no charge.

6. Provide evidence that a formalized and effective process to address student complaints is in place and available to students.

The Student Handbook describes the student grievance procedure. The Student Handbook is published annually so that changes can be made to stay current with all state and federal policies and rules.

Also students may at any time submit questions or complaints in boxes located across campus. The Office of the Vice President for Enrollment and Student Services collects the input from these boxes and addresses the student's question or complaint. The results are given to the student, reviewed by The Leadership Council, published on a public bulletin board in the Main Building of campus, and published in the Student Services Annual Report.

7. Provide institutional recommendations as the result of the program review and planned actions to implement recommendations.

Modifications concerning degree course requirements as well as course descriptions will be reviewed. If necessary, the plan of studies will be updated to reflect new course content and/or course requirements for degree obtainment. Courses that are no longer relevant to industry or require updating will be reviewed and if necessary modifications will be made.