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| **School or Division** | School of Business and Technology |
| **Program or Certificate or** | Choose an item. |
| **New degree or certificate program** | Engineering Technology Support Specialist |
| **Proposed by (faculty only)** | Andrew Blitz |
| **Presenter (faculty only)** | Andrew Blitz |
| Note that the presenter (faculty) listed above must be present at the Curriculum Committee meeting or the proposal will be returned to the School or Division and must be submitted for a later date. | |
| **Submission date** | 12/2/2015 |
| **Course prefix, number, and title** | EET 1084C Introduction to Electronics |

**Section I, New Course Information (must complete all items)**

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| **List School or Division** | School of Business and Technology |
| **List course prerequisite(s) and minimum grade(s) (must include minimum grade if higher than a “D”)** | None  D |
| **Will students be taking any of the prerequisites listed for this course in different parts of the same term (ex. Term A and Term B)** | No |
| **List course corequisites** | None |
| **Is any corequisite for this course listed as a corequisite on its paired course?**  (Ex. CHM 2032 is a corequisite for CHM 2032L, and CHM 2032L is a corequisite for CHM 2032) | No  None |
| **Course credits or clock hours** | 3 |
| **Contact hours (faculty load)** | 3 |
| **Select grade mode** | Standard Grading (A, B, C, D, F) |
| **Credit type** | College Credit |
| **Course description** (provide below) | |
| THIS COURSE PROVIDES AN INTRODUCTION TO THE BASIC FUNDAMENTALS, TERMINOLOGY, AND APPLICATIONS USED IN THE ELECTRONICS INDUSTRY. THEORIES OF BOTH DIRECT AND ALTERNATING CURRENT, THE INTERRELATIONSHIP OF MAGNETISM AND ELECTRICITY, SEMICONDUCTOR PROPERTIES, AND THE FUNDAMENTALS OF ELECTRONICS ARE EXPLORED. COURSE CONTENT INCLUDES CIRCUIT THEORY PRINCIPLES, ELECTRONIC COMPONENTS, SEMICONDUCTOR USAGE, AMPLIFIERS, POWER SUPPLIES, DIGITAL LOGIC TECHNIQUES, AND ELECTRONIC INSTRUMENTS. BASIC LABORATORY EXERCISES TO STRENGTHEN THE TOPIC COVERAGE AS IT PERTAINS TO BASIC TESTING AND MEASUREMENT INVOLVING BOTH ANALOG AND DIGITAL CIRCUITS ARE INCLUDED. | |

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| **General topic outline** (type in outline below) |
| * Basic AC and DC Circuits * Schematic Diagrams * Tools and Instrumentation * Electrical Wiring * Bonding and Grounding |

**Learning Outcomes:** For information purposes only. Type in all learning outcomes, assessments, and general education competencies as they should be displayed in the syllabus. More rows can be added if necessary.

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| **Learning Outcomes** | **Assessments** | **General Education Competencies** |
| DESCRIBE THE DIFFERENCES BETWEEN ALTERNATING CURRENT (AC) AND DIRECT CURRENT (DC) | Examinations and Lab Exercises |  |
| EXPLAIN THE CHARACTERISTICS OF SOLID STATE ELECTRONIC DEVICES | Examinations and Lab Exercises |  |
| DESIGN, DIAGRAM, AND CONSTRUCT AN ELECTRONIC CIRCUIT | Examinations and Lab Exercises |  |
| DEMONSTRATE ABILITY TO MEASURE ELECTRONIC CIRCUITS USING COMMON INDUSTRY TOOLS | Examinations and Lab Exercises | TIM |

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| **ICS code for this course** | ADVANCED AND PROFESSIONAL - 1.11.09 - ENGINEERING |
| **Should any major restriction(s) be listed on this course? If so, select "yes" and list the appropriate major restriction code(s) or select "no".** | No  None |
| **Is the course an “International or Diversity Focus” course?** | No, not International or Diversity Focus |
| **Is the course a General Education course?** | No |
| **Is the course a Writing Intensive course?** | No |
| **Is the course repeatable\*?**  (A repeatable course may be taken more than one time for additional credits. For example, MUT 2641, a 3 credit hour course can be repeated 1 time and a student can earn a maximum of 6 credits).  \*Not the same as Multiple Attempts or Grade Forgiveness | No  None |
| **Do you expect to offer this course three times or less (experimental)?** | No |

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| **Impact of Course Proposal** | |
| **Will this new course proposal impact other courses, programs, departments, or budgets?** | No |
| **If the answer to the question above is “yes”, list the impact on other courses, programs, or budgets?** | None |
| **Have you discussed this proposal with anyone (from other departments, programs, or institutions) regarding the impact? Were any agreements made? Provide detail information below.** | |
| No | |

**Section II, Justification for proposal**

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| This course will be an introductory course for the state approved Engineering Technology Support Specialist certificate, supported and funded by the TAAACCCT (Xcel-IT) grant. Students completing this certificate will be prepared for entry level positions in manufacturing, agricultural processing, and related industrial employers performing operation, maintenance, and diagnosis of equipment and processes. |

**Section III, Important Dates and Endorsements Required**

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| **List all faculty endorsements below. (Note that proposals will be returned to the School or Division if faculty endorsements are not provided).** |
| Andrew Blitz  Vincent Butler |

**nOTE:** Changes for the Fall 2016 term must be submitted to the Dropbox by the February 5, 2016 deadline and approved no later than the March 4, 2016 Curriculum Committee meeting. Changes during mid-school year are NOT permitted. Extreme circumstances will require approval from the appropriate Dean or Associate Vice President as well as the Provost and Vice President of Academic Affairs to begin in either the Spring 2016 or Summer 2016 term.

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| **Term in which approved action will take place** | Fall 2016 |
| **Exception to term (other than Fall 2016)** | Spring 2016 |
| **Provide an explanation below for the requested exception to the Fall 2016 start date.** | |
| This course is part of the Engineering Technology Support Specialist program that is required by the Statement of Work Modification to the TAACCCT (Xcel-IT) grant approved by the USDOL. In order to meet grant outcomes, FSDW must start this course in the summer of 2016 in order to allow sufficient time to complete two cohorts before the end of the grant. | |

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| **Any exceptions to the term start date (other than Fall 2016) requires the signatures of the Academic Dean or Associate Vice President and the Provost and Vice President, Academic Affairs prior to submission to the Dropbox.** | | |
| **Dean or Associate Vice President** | **Signature** | **Date** |
| Dr John Meyer |  |  |
| **Provost and VPAA** | **Signature** | **Date** |
| Dr. Denis G. Wright |  |  |

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| **Required Endorsements** | **Type in Name** | **Select Date** |
| **Department Chair or Program Coordinator/Director** | Andrew Blitz | Click here to enter a date. |
| **Academic Dean or Associate Vice President** | Type name here | Click here to enter a date. |
| **Dean’s Council Representative** | Type name here | Click here to enter a date. |

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| **Select Curriculum Committee Meeting Date** | Choose an item. |

Completed curriculum proposals must be uploaded to Dropbox by the deadline. Please refer to the *Curriculum Committee Calendar* document available in the document manager in the FSW Portal:

* Document Manager
* VP Academic Affairs
* Curriculum Process Documents

**Important Note to Faculty, Department Chairs or Program Coordinators, and Deans or an Associate Vice President:**

Incomplete proposals or proposals requiring corrections will be returned to the School or Division. If a proposal is incomplete or requires multiple corrections, the proposal will need to be completed or corrected and **resubmitted to the Dropbox for the next Curriculum Committee meeting**. All Curriculum proposals require approval of the Provost and Vice President of Academic Affairs. Final approval or denial of a proposal is reflected on the completed and signed Summary Report.