2019-2020

Undergraduate Catalog Program Transfer Single Articulation Pathways (TSAP) Programs

Program: Electrical Engineering Technology Degree: Bachelor of Science

I. Introduction

- a. <u>School of Polytechnic</u>
- b. Student Learning Outcomes
 - i. Upon completion of a Bachelor of Science in Electrical Engineering Technology students will be able to:
 - Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline Accreditation;
 - 2. Design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
 - Apply written, oral, and graphical communication in broadly-defined technical and nontechnical environments; and an ability to identify and use appropriate technical literature;
 - 4. Conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
 - 5. Function effectively as a member as well as a leader on technical teams.
- c. The Electrical Engineering Technology Program is accredited by the Engineering Accreditation Commission of ABET, <u>www.abet.org.</u>
- d. **TSAP Information**

II. Program Delivery

a. Program is a combination of on-campus and online classes.

III. Declaring This Major

a. Declare this major within the <u>School of Polytechnic</u>

IV. General Requirements

- a. <u>Degree Requirements</u>
- b. <u>General Education Requirements* (some programs require specific courses that also meet</u> <u>general education requirements)</u>
- c. Overlapping Courses
- d. College Graduation Requirements
- e. Academic Regulations

V. Program Requirements

- a. Students admitted to the program must have completed the Transfer Single Articulation
 Pathway (TSAP) Electrical Engineering Technology A.S. Program at Ivy Tech Community College.
 The Ivy Tech transcript must clearly state that the student was enrolled in the TSAP Program.
- b. Required Ivy Tech courses for admission to program are:
 - i. ENGL 111 English Composition

- ii. COMM 101 Fundamentals of Public Speaking
- iii. MATH 136 College Algebra
- iv. MATH 137 Trigonometry with Analytical Geometry
- v. MATH 221 Calculus for Technology I
- vi. MATH 222 Calculus for Technology I
- vii. PHYS 101 Physics I
- viii. PHYS 102/CHEM111 Physics II/ Chemistry I
- ix. PHIL 102 Ethics
- x. IVYT 111 Student Success for University Transfer
- xi. EETC 279 Electrical Engineering Technology Capstone Course
- xii. EECT 111 Introduction to Circuit Analysis
- xiii. ECET 112 Digital Fundamentals
- xiv. ECET 121 Electronics Circuit Analysis
- xv. ECET 122 Digital Applications
- xvi. ECET 128 Intro to C Programming
- xvii. ECET 211 AC Circuit Analysis
- xviii. ECET 222 Intro to Microcontrollers
- xix. ECET 223 Electrical Machines
- xx. Social & Behavioral Ways of Knowing Elective
- c. General Education Requirements: The Indiana Statewide General Education Core is satisfied as part of the TSAP program. The Purdue Fort Wayne General Education Capstone Course (Category C8) is included in your major requirements.
- d. Listing of Major courses and supporting courses required at PFW
 - i. ECET 11400 Introduction to Visual Basic 3cr.
 - ii. CHEM 11100 or PHYS 21900 General Chemistry or General Physics II 3-4cr.
 - iii. IET 10500 Industrial Management 3cr.
 - iv. CPET 19000 MATLAB 3cr.
 - v. GEN ED General Education B7 Elective 3cr.
 - vi. ECET 29600 Electronic System Fabrication 3cr.
 - vii. ECET 30700 Analog Network Signal Processing 4cr.
 - viii. ECET 35700 Real-Time Digital Signal 4cr.
 - ix. ECET 30200 Control Systems 4cr.
 - x. ECET 30300 Communications 4cr.
 - xi. ECET 36100 Introduction to PLC and Pneumatic Systems 4cr.
 - xii. ECET 47000 Technical Project Management 3cr.
 - xiii. ECET 49000 Senior Design I 1cr.
 - xiv. ECET 491000 Senior Design II 2cr.
 - xv. ECET XXXX ECET/CPET Elective 4cr.
 - xvi. ECET XXXX ECET/CPET Elective 3cr.
 - xvii. ENGL 23401 Technical Report Writing 3cr.
 - xviii. ENGL 42101 Technical Writing-Project 3cr.
 - xix. STAT/IET 30100/20500 Statistics/ Applied Statistics for Engineering Technology
- e. Purdue Fort Wayne course requires that a minimum of 60 transfer hours are accepted toward degree requirements.
- *f.* Minor not applicable
- g. University graduation requirements of 2.0 GPA is accepted.

- *h.* Special academic regulations specific to the program: Students must complete all PFW courses earning grades of C- or better.
- i. Student Responsibilities: You are responsible for satisfying the graduation requirements specified for your selected program. Thus, it is essential that you develop a thorough understanding of the required courses, academic policies, and procedures governing your academic career. All requests for exceptions to specific requirements must be made in writing and may be granted only by written approval from the appropriate chair or dean.
- j. Credit by Self-Acquired Competency limited.
- k. Program Transfer credit limitations only the TSAP courses can be transferred from Ivy Tech. Final two years of courses must be taken at Purdue University.
- I. Total credits for degree: 120 credit hours (including TSAP transfer credits)