Electronics Technology | Associate in Applied Science  
Field of Study Code: INET.AAS

Catalog Description:

The Integrated Engineering Technology (InET) degree, a two-year program leading to an AAS degree, is designed to meet industry needs for multifunctional technicians competent in mechanics, computers, and electronics technology. This innovative program is an activity-based approach to learning where students work in teams. As InET engineering technicians, students may work individually or as members of a professional team, applying aspects of scientific and engineering concepts to the implementation of existing technologies and the creation of new technologies in the areas of administration, installations and maintenance of robotics and automated systems development, operation and maintenance. This degree requires 64 hours in program requirements, program electives and general education in the courses listed below.

Program Requirements .............................................. 51
Elect 1100 Electricity and Electronics Fundamentals ..... 3
Elect 1101* Circuits I .................................................. 3
Elect 1110 Introduction to Technology..................... 2
Elect 1120 Electronic Documentation ...................... 2
Elect 1141 Digital Fundamentals ............................... 3
Elect 1151* Electronic Devices and Applications ........ 4
Elect 1201 Renewable Energy Fundamentals ............. 2
Elect 2255* Industrial Controls ................................. 3
Elmec 1110 Motor and Generator Fundamentals ......... 3
Elmec 1171 Introduction to Robotic Technology ........ 3
Elmec 1190 Introduction to Programmable Logic Controllers ........................................ 3
Elmec 1420 Drive Components .................................. 2
Elmec 2410* Programmable Controller II (PLC II) ...... 3
Elmec 2600* Motion Control: Servo and Stepper Motor Application and Control ....................... 2
Engli 1101* English Composition I ............................ 3
Math 1115* Technical Mathematics I ....................... 3
Physi 1100* Physics .................................................. 4
Speec 1100* Fundamentals of Speech Communication .. 3

Program Electives ..................................................... 7
Select seven credits from the courses listed below.
Elect 1102* Circuits II ................................................. 4
Elect 1161* Electronic Communications .................... 4
Elect 2001* Green Energy Systems ......................... 3
Elect 2245* Programmable Logic Devices ................. 4
Elect 2273* Embedded Systems and Microcontroller Programming ........................................ 3
Elect 2860* Internship (Career & Technical Education) .................................................. 1 to 4
Elmec 1120 Residential Wiring ................................. 3
Elmec 1130 Industrial Electricity ............................... 3
Elmec 1141 Hydraulics and Pneumatics .................... 3
Elmec 1150 National Electrical Code ........................ 3

Suggested Course Sequence  
(Full-Time Enrollment)

Please note: A student’s readiness to perform college-level coursework is based on the student’s placement test and/or ACT scores. Below 1000 level coursework may be required prior to the student taking courses in the suggested sequences.

First Semester (16 credits)
• Elect 1100 (3)
• Elect 1110 (2)
• Elect 1141 (3)
• Elmec 1420 (2)
• Engli 1101 (3)
• Elmec 1110 (3)

Second Semester (14 credits)
• Elect 1101 (3)
• Elect 1120 (2)
• Elmec 1190 (3)
• Math 1115 (3)
• Speec 1100 (3)

Summer Term (7 credits)
• PHYSI 1100 (4)
• General Education (3)

Third Semester (14 credits)
• Elect 1201 (2)
• Elect 1151 (4)
• Elmec 2410 (3)
• Elmec 2600 (2)
• Elmec 1171 (3)

Fourth Semester (13 credits)
• Elect 2255 (3)
• Electives (7)
• General Education (3)

Summer Term
Internship (recommended)

For more information:
If you are considering this program as an area of study, please contact the Business and Technology Division office at 630-942-2592.
General Education .................................................. 6
Each candidate for an Associate in Applied Science (A.A.S.) degree shall satisfactorily complete a minimum of 18 credits in General Education. (In addition to the courses listed below.)

For the Integrated Engineering Technology degree, some General Education courses are already listed under program requirements. Therefore, students only need 6 credits besides those listed under program requirements.

Under the specified General Education headings below, the following courses are required:

Communication: 6 credits
Written: (3 credits) English 1101 or 1105
(English 1101 in program requirements fulfills this requirement)
Oral: (3 credits) Speech 1100, 1120 or 1150
(Speech 1100 in program requirements fulfills this requirement)

Physical and Life Sciences: 3 to 5 credits
At least one course with a laboratory component
(Physics 1100 in program requirements fulfills this requirement)

Mathematics: 3 to 5 credits
Select a minimum of 3 credits (1000 level or above).
Select Mathematics 1102, 1104 or 1120 only where required in the degree program. Only one from the following three courses may count toward overall degree requirement credit: Mathematics 1635, Psychology 2280 or Sociology 2205. Only one of the following courses may count toward overall degree credit: Mathematics 1428 or Mathematics 1431.
(Mathematics 1115 in program requirements fulfills this requirement)

Humanities and Fine Arts: 3 credits

Social and Behavioral Sciences: 3 credits
Complete at least 2 credits from the list of courses in the Global/Multicultural Studies or Contemporary Life Skills Category.

TOTAL CREDITS FOR AAS DEGREE
64
Career Information INET.AAS

**Job Title(s):** Engineering Technicians, Except Drafters, All Other

"All Other" titles represent occupations with a wide range of characteristics which do not fit into one of the detailed O*NET-SOC occupations. O*NET data is not available for this type of title.

For salary and wage information, please visit: [www.onetonline.org](http://www.onetonline.org)

If you would like information regarding internships, resume development, interviewing and job search skills, please contact the Career Services Center

Phone: 630-942-2230

[www.cod.edu/careerservices](http://www.cod.edu/careerservices)  
Twitter: @codcareercenter

**Related Occupations:**

- Electrical Engineering Technologist
- Electromechanical Engineering technologist
- Electronics Engineering Technologist
- Manufacturing Engineering Technologist
- Mechanical Engineering Technologist
- Manufacturing Production Technician
- Non-Destructive Testing Specialist