ASSOCIATE DEGREE PROGRAM | TECH - ENGINEERING TECHNOLOGY

ENGINEERING TECHNOLOGY

Specialization: Machine Learning and Design Techniques

ABOUT THIS PROGRAM

IS THIS PROGRAM FOR YOU?

If you are interested in understanding how machine learning models can help inform process improvements, then this may be the right program for you.

A PROGRAM TO FUEL YOUR FUTURE

Explore how systems are designed and ways to improve existing processes leveraging machine learning when you pursue this specialization.

Students will utilize computer design tools to create three dimensional models and explore process improvements. This includes developing, testing and training machine learning models to apply linear regression for making predictions.

CAREER OPPORTUNITIES

Graduates of DeVry's Engineering Technology associate degree program with a specialization in Machine Learning and Design Techniques may consider, but are not limited to, the following careers:

- Electrical and Electronic Engineering Technologists and Technicians
- Engineering Prototyping and Fabrication Tech Support Specialist
- Electro-Mechanical and Mechatronics Technologists and Technicians
- Engineering CAD Technician
- Engineering Technologist and Technicians, Except Drafters, All Other
- Industrial Engineering Technologists and Technicians
- Manufacturing Engineering Technician

WHAT YOU'LL LEARN

ESSENTIALS

- Communicate methods and findings
- Collaborate in a dynamic work environment
- Solve complex problems
- Analyze numerical data
- Apply appropriate technologies

TECH CORE

- Illustrate the basics of computing and explain the value of data and troubleshooting
- Install and configure operating systems using Command Line Interface (CLI)
- Solve technical problems using an algorithmic approach and basic programming and coding methods.
- Network, secure, and deploy digital devices and sensors into the internet of things ecosystem

PROGRAM

- Design and analyze circuits ensuring proper construction, voltage and currents
- Understand the essential components of control systems designs and how to apply ladder logic to debug or maintain applications

SPECIALIZED

- Utilize data and analysis techniques to solve problems and drive decisions
- Leverage computer-aided design (CAD) software to facilitate the generation, modification and optimization of system design
- Explore and apply process improvement methodologies to evaluate and enhance the performance of systems
- Solve technical problems using an algorithmic approach and basic programming and coding methods

QUICK FACTS

64
CREDIT HOURS
minimum credit hours required for graduation

21
COURSES

ACCREDITATION MATTERS

ABET Engineering Technology Accreditation Commission

ETAC of ABET accredits postsecondary, degree-granting programs that meet their global standards for technical education. This is a global mark of quality that is respected by employers and professional associations within the Engineering Technology field. The Associate in Engineering Technology degree program is accredited by The Engineering Technology Accreditation Commission of ABET (ETAC of ABET) www.abet.org.

CERTIFICATION EXAM ALIGNED CURRICULUM

SKILLS FOCUSED

Experience elements of our technology curriculum focused on real-world industry standards and prepare for certification opportunities to help validate your knowledge and skills, such as:

- CompTIA Network+
- CompTIA Linux+
- CompTIA A+
- CompTIA ITF+
- PCEP Certified Entry-Level Python Programmer

MINIMUM COMPLETION TIME*
1 year 4 months

OR

NORMAL COMPLETION TIME**
2 years

ACCELERATE ON YOUR SCHEDULE

Choose the schedule that best fits your goals and commitments. You can earn your **Associate Degree** in as little as **1 year 4 months.**

Or, follow a normal schedule and complete your program in 2 years.

* Minimum completion time does not include breaks and assumes 3 semesters of year-round, full-time enrollment in 15-17 credit hours a semester per 12-month period.
** Normal completion time includes breaks and assumes 2 semesters of enrollment in 15-17 credit hours per semester per 12-month period.

DeVry University

Associate Degree Program | Tech - Engineering Technology

Engineering Technology - Machine Learning and Design Techniques

ESSENTIALS — 26 CREDIT HOURS

COMMUNICATION SKILLS

ENGL112 Composition

Select one

SPCH275 Public Speaking
SPCH276 Intercultural Communication

HUMANITIES

Select one

ETHC232 Ethical and Legal Issues in the Professions
ETHC334 Diversity, Equity and Inclusion in the Workplace

SOCIAL SCIENCES

SOCS185 Culture and Society

MATHEMATICS AND NATURAL SCIENCES

MATH114 Algebra for College Students
TECH204 Everyday Physics

PERSONAL AND PROFESSIONAL DEVELOPMENT

CARD205 Career Development
COLL148 Critical Thinking and Problem-Solving

BE AN ACTIVE PART OF AN INCLUSIVE FUTURE

Customize your curriculum by choosing Diversity, Equity and Inclusion (DE&I) course alternates for your Communication Skills, Humanities and Social Science courses. These course options – denoted by this icon – highlight relevant topics to help empower you to promote an inclusive workplace.

TECH CORE — 12 CREDIT HOURS

TECH CORE

CEIS101 Introduction to Technology and Information Systems
CEIS106 Introduction to Operating Systems
CEIS110 Introduction to Programming
CEIS114 Introduction to Digital Devices

SPECIALIZED — 10 CREDIT HOURS

MACHINE LEARNING AND DESIGN TECHNIQUES

TECH221 Data-Driven Decision-Making

Two of:

ECT313 Generative Design
TECH231 Introduction to Artificial Intelligence Applications
TECH310 Process Improvement

PROGRAM — 16 CREDIT HOURS

PROGRAM FOCUS

ECT226 Electronic Device and System Foundations
ECT286 Automation and Controls

Three of[1]:

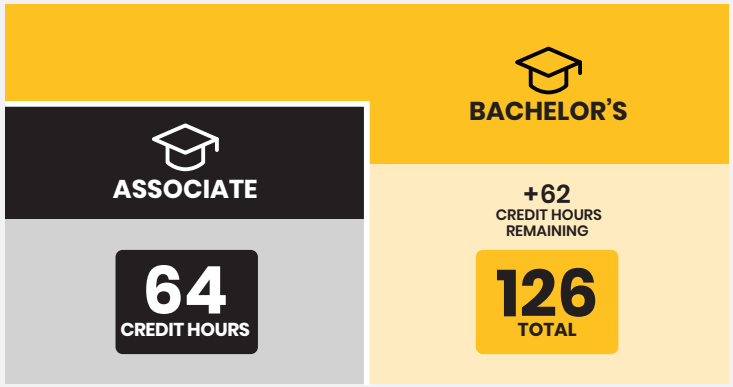
ECT308 Introduction to Computer Aided Design
ECT313 Generative Design
ECT315 Industrial IoT
ECT320 Manufacturing Processes and Systems
ECT325 Electromechanical Systems
NETW191 Fundamentals of Information Technology and Networking
NETW212 Introduction to Cloud Computing
SEC285 Fundamentals of Information System Security
TECH301 Design of Experiments

[1]Students choosing to complete ECT313 within the Machine Learning and Design Techniques Option must take ECT308.

CAREER PREPARATION

CEIS298 Introduction to Technical Project Management

Earn a credential at every step.



HOW DO CREDENTIALS STACK?

This Associate in Engineering Technology with a specialization in Machine Learning and Design Techniques can serve as a steppingstone to our Engineering Technology bachelor's degree. If you choose to continue on with your education, all credits apply to this credential. Build your confidence – and your resume – when you start your journey at DeVry.*

*The figures displayed represent the minimum credit hours required for graduation. Additional coursework may be necessary to complete program requirements. At the time of application to the next credential level, an evaluation of qualifying credits will occur and the most beneficial outcome will be applied. Future programmatic changes could impact the application of credits to a future program. Refer to the academic catalog for details.

visit DeVry.edu | Call 888.DeVry.04

DeVry University