

ENGINEERING TECHNOLOGY (ENGT)

ENGT 127 Introduction to Robotics 4 cr.

This course will introduce students to the field of robotics. A variety of multidisciplinary topics necessary to understand the fundamentals of designing, building, and programming robots are covered. Topics are presented in lecture format then applied in a laboratory setting. Students will be required to gradually complete the design and construction of a robot using robotics kits and auxiliary technology following requirements of an overall robotics competition style set of demonstrations. Students will also be introduced to general industrial robotics concepts. Code 4 course fee.

ENGT 191 Design - Technical Projects and Experience 1 cr.

This course is an experiential learning course that focuses on the design phase of the engineering design process. Students will be introduced to the sub-phases of design: concept creation, requirements definition and technical design. All phases will be exercised by students doing a semester long design project. It is recommended that students take this course in conjunction with "Tools for Technical Communications." Code 4 course fee.

ENGT 192 Build - Technical Projects and Experience 1 cr.

This course is an experiential learning course that focuses on the build phase of the engineering design process. Students will be able to execute the creation of a test-ready product or prototype in one of the following technology areas: construction, electrical, mechanical, industrial process or software by students doing a semester long build project. Code 4 course fee.

ENGT 193 Test - Technical Projects and Experience 1 cr.

This course is an experiential learning course that focuses on the test phase of the engineering design process. Students will be introduced to testing methodologies for one of the following technology areas that aligns with their project: construction, electrical, mechanical, industrial process or software. Testing methodologies will be exercised by students doing a semester long testing project. It is recommended that you take this course in conjunction with "Principles of Quality Control & Quality Management" or "Quality Management & Applied Statistics." Code 4 course fee.

ENGT 195 Tools for Technical Communications 3 cr.

This course is an overview of tools and the contextual usage of technical communications. Students will utilize software tools for information in the form of written text, technical drawings, graphics, video, data and analytics. In addition to learning the fundamentals of these tools, students will exercise them in the context of formal and informal professional scenarios. Code 4 course fee.

ENGT 196 Project Management 3 cr.

This course will familiarize a student with the Project Management Body of Knowledge (PMBOK), a set of standard terminology and guidelines for project management. The PMBOK is developed and maintained by the Project Management Institute (PMI) which oversees industry standard project manager certification known as Project Management Professional (PMP). This course will enable a student to move towards their PMP certification that requires formal project management training, such as this course, passing the PMP examination, time spent leading and directing projects and project management experience. Code 4 course fee.