

ROBOTICS TECHNOLOGY

Faculty

M. Graham

This program provides skills necessary to maintain robotic machines in industrial applications. It incorporates the basics of mechanical structure and motion; electronic control and vision; and programming of a robot. Many manufacturing and dangerous industrial applications are turning to the use of robotic machinery. Graduates of this program will provide a workforce that can maintain, repair and modify robots.

Associate of Applied Science Degree Robotics Technology

(Recommended Curriculum)

	Credits
General Education (Minimum 17 credits)	
General education coursework can be completed from within or outside of the major field of study.	
1. Exploration and Participation	
MATH 0930 Intermediate Algebra	4
2. Communication	
CO/M 1030 Interpersonal Communication	3
ENGL 0610 Basic Writing II	3
3. Relationship with the World	
POLS 1000 American and Wyoming Government	3
4. General Education Electives	3
Must be chosen from areas 1, 2, or 3 above.	
5. Physical Education	1

Major Requirements

DESL 1850 Basic Hydraulics	3
ELTR 1515 Basic AC/DC Electronics	3
ELTR 2815 Programmable Logic Controllers	4
ENTK 1510 Drafting I	4
ENTK 2510 CAD-3D Modeling	4
MCHT 1610 Machine Tool Technology I	2
MCHT 1620 Machine Tool Technology II	2
ROBO 1610 Introduction to Robotics	2
ROBO 1615 Competition Robotics I	2
ROBO 1650 Electromechanics	3
ROBO 2580 LabView	2
ROBO 2590 Motion Control	4
ROBO 2595 Robot Systems	3

ROBO 2600 Intro to Design and Simulation	3
ROBO 2616 Robot Construction	2
ROBO 2617 Competition Robotics II	2
ROBO 2980 Cooperative Work Experience	2-6
ROBO 2990 Special Topics in Automation and Robotics	2-6
WELD 1700 General Welding or	
WELD 1820 GMAW and GTAW Welding	2.5

A minimum of 64 approved semester credits are required for graduation. For specific graduation requirements see "Academic Policies" and "Degree Requirements."

Robotics Technology Certificate

(Certificate Requirements)

A minimum of 30 credits is required from the list below	
Course	Credits
DESL 1850 Basic Hydraulics	3
ELTR 1515 Basic AC/DC Electronics	3
ELTR 2815 Programmable Logic Controllers	4
ENTK 1510 Drafting I	4
ENTK 2510 CAD 3D Modeling	4
MCHT 1610 Machine Tool Technology I	2
MCHT 1620 Machine Tool Technology II	2
ROBO 1610 Introduction to Robotics	2
ROBO 1615 Competition Robotics I	2
ROBO 1650 Electromechanics	3
ROBO 2580 LabView	2
ROBO 2590 Motion Control	4
ROBO 2595 Robot Systems	3
ROBO 2600 Intro to Design and Simulation	3
ROBO 2616 Robot Construction	2
ROBO 2617 Competition Robotics II	2
WELD 1700 General Welding or	
WELD 1820 GMAW and GTAW Welding	2.5

For specific graduation requirements see "Academic Policies" and "Degree Requirements."

ONLY COURSES NUMBERED 1000 OR ABOVE CAN BE USED TOWARD THE ASSOCIATE OF ARTS, ASSOCIATE OF SCIENCE, ASSOCIATE OF BUSINESS, ASSOCIATE OF FINE ARTS AND ASSOCIATE OF APPLIED SCIENCE DEGREES.