Robotics

Department Information

• Official Program Curriculum:

catalog.ndsu.edu/programs-study/undergraduate/robotics/ (http://catalog.ndsu.edu/programs-study/undergraduate/robotics/)

Minor Requirements

Minor: Robotics

Required	Credits: 18
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ECE 463	Modern Control	
ECE 476	Advanced Embedded Systems	
ME 475	Automatic Controls	
ME 476	Mechatronics	
Kinematics & Dynamics of Machineries		
ABEN 478	Machinery Analysis & Design	
ABEN 479	Fluid Power Systems Design	
ME 442	Machine Design I	
ME 489	Vehicle Dynamics	
ECE 761	Advanced Control Theory I *	
Applications of Unmanned Systems		
ABEN 358	Electric Energy Application in Agriculture	
ABEN 452	Bioenvironmental Systems Design	
IME 437	Methods for Precision Manufacturing	
IME 482	Automated Manufacturing Systems	
PAG 115	Introduction to Precision Agriculture	
PAG 315	Electronic Systems in Precision Ag	
PAG 454	Applications of Precision Agriculture	
CE 425	Bridge Evaluation and Rehabilitation	
CE 452	Fundamentals of Oil & Gas Pipeline: Design, Operation, Inspection & Maintenance	
CE 782	Introduction to Intelligent Infrastructure *	
IME 782	Robotics/CAD/CAM/Control Systems *	
IME 784	Computer Integrated Manufacturing *	

Total Credits

* Graduate level courses will require the student to obtain a class permit from the department teaching the class before enrolling.

Program Notes

• Any course used to satisfy Part One: Core Courses may not use that course to satisfy any of the nine credits for Part Two: Approved Courses.