

Mechatronics (BP/EP) Associate in Applied Science Degree

Semester Sequence

Offered at Brooklyn Park and Eden Prairie

First Semester

ARET1126	Mechanical Power Transmission	3
ARET1161	Mechatronic Systems	3
ARET1175	Industrial Electricity and Electronics I	3
ARET1200	Introduction to Robotics	2
MATH1150	Applications of Quantitative Reasoning or	3
MATH1400	College Algebra or Any course from MnTC Goal Area 4	4
PHIL1100	Critical Thinking for College Success or Any course from MnTC Goal Area 2	3

Total Credits 17

Second Semester

ARET1130	Maintenance Operations	2
ARET1140	Computer Integrated Manufacturing	3
ARET1155	Automation Controls	3
ARET1180	Industrial Electricity and Electronics II	3
ENGC1250	SOLIDWORKS I	4
ENGL1070	Technical Writing or	3
ENGL1100	Writing and Research	4

Total Credits 18

Summer Semester

PHYS1005	Introductory Physics I or Any course from MnTC Goal Area 3	3
	General Education Electives	3

Total Credits 6

Third Semester

ARET1165	Vision Systems for QA/SPC	3
ARET1185	Sensor Applications	2
ARET1190	Programmable Logic Controllers	3
ARET2105	Fluid Power Motion Control	2
	Technical Studies Electives	6

Total Credits 16

Fourth Semester

ARET1170	Troubleshooting Mechatronic Systems	3
ARET2101	Advanced Automation Controls	3
ARET2111	Advanced Programmable Logic Controllers	3

ARET2200	FANUC Robotics Operations	2
ARET2250	FANUC Vision Systems	1
	Technical Studies Electives	3

Total Credits 15

General Education Electives

Choose three credits from Hennepin Technical College's Minnesota Transfer Curriculum (MnTC) general education courses.

Choose a Total of: 3 Credits

Technical Studies Electives

Any Automation Robotics Engineering Technology (ARET), Center for Manufacturing and Applied Engineering (CMAE), Fluid Power Engineering and Motion Control (FLPW), Machine Tool Technology (MACH), or Welding and Metal Fabrication (WLDG) course that is not required for this award may be used as an elective.

Choose a Total of: 9 Credits

Graduation (72 Credits)

Semester listings reflect the recommended sequence. Due to circumstances beyond our control, the information herein is subject to change without notice.

4/15/2024 : BP / EP 4013