

## Automation Robotics Engineering Technology (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

#### Total Credits 14

#### Second Semester

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

#### Total Credits 14

#### Third Semester

ARET1165	Vision Systems for QA/SPC	3
ARET1185	Sensor Applications	2
ARET1190	Programmable Logic Controllers	3
ARET2105	Fluid Power Motion Control	2
PHIL1100	Critical Thinking for College Success or Any course from MnTC Goal Area 2	3
PHYS1005	Introductory Physics I or Any course from MnTC Goal Area 3	3

#### Total Credits 16

#### Fourth Semester

ARET1170	Troubleshooting Mechatronic Systems	3
ARET2101	Advanced Automation Controls	3
ARET2111	Advanced Programmable Logic Controllers	3
ARET2150	Engineering Design and Fabrication	2
ARET2200	FANUC Robotics Operations	2
	General Education Electives	3

#### Total Credits 16

**General Education Electives**

A complete list of MnTC courses and Goal Areas that can be used to meet General Education requirements can be found at [www.hennepintech.edu](http://www.hennepintech.edu). The same course cannot satisfy more than one MnTC Goal Area requirement.

**Choose a Total of: 3 Credits****MnTC Goal Area 2**

A complete list of MnTC courses and Goal Areas that can be used to meet General Education requirements can be found at [www.hennepintech.edu](http://www.hennepintech.edu). The same course cannot satisfy more than one MnTC Goal Area requirement.

BIOL1000	Biology in Society	4
BIOL1100	Nutrition and Health	3
BIOL1300	Introduction to Forensic Science	3
BIOL1400	Human Biology	4
BIOL2005	General Biology I	4
BIOL2125	Anatomy and Physiology I	4
BIOL2225	Anatomy and Physiology II	4
BIOL2235	Microbiology	4
COMM1260	Small Group Communication	3
MATH1150	Applications of Quantitative Reasoning	3
PHIL1100	Critical Thinking for College Success	3
PHYS1005	Introductory Physics I	3
PHYS1010	Introductory Physics II	3
SOCI1100	Introduction to Sociology	3

**MnTC Goal Area 3**

BIOL1000	Biology in Society	4
BIOL1300	Introduction to Forensic Science	3
BIOL1400	Human Biology	4
BIOL2005	General Biology I	4
BIOL2125	Anatomy and Physiology I	4
BIOL2225	Anatomy and Physiology II	4
BIOL2235	Microbiology	4
CHEM1000	Introduction to Chemistry	4
CHEM1100	General, Organic, and Biological Chemistry Foundations	4
PHYS1005	Introductory Physics I	3
PHYS1010	Introductory Physics II	3
PHYS2005	College Physics I	4
PHYS2010	College Physics II	4

**MnTC Goal Area 4**

MATH1150	Applications of Quantitative Reasoning	3
MATH1250	Introduction to Statistics	3
MATH1400	College Algebra	4
PHIL1000	Introduction to Logic	3

**Graduation (60 Credits)**

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

3/14/2023 : BP 4003 / EP 4004