Industrial Automation Maintenance, A.A.S.

24-25 catalog

Full-time with summer course schedule

Description: This program is for students interested in robotics and their use in industrial settings. Students will learn concepts of electricity, programmable logic controllers, motors, hydraulics, robotics, and the integration of robotic systems.

Completion Time: 2 Years

This is suggested course sequencing. Please see a counselor or advisor for individual adjustments.

Year 1

Fall Semester

❑ Success Skills for the 21st Century	GNST 100	*3 Cr.*
❑ Electrical Circuit Analysis*	ATMN 110	*3 Cr.*
❑ Freshman English I	ENGL 100	*3 Cr.*
❑ Industrial Applied Algebra	INDS 122	*2 Cr.*
❑ Communication Requirement		*3 Cr.*

Spring Semester

❑ Industrial Motors and Controls	ATMN 140	*4 Cr.*
❑ Industrial Control Systems-Allen Bradley	ATMN 160	*4 Cr.*
❑ Industrial Applied Geometry	INDS 124	*2 Cr.*
❑ Choose 1		
Pneumatics	INDS 106	*3 Cr.*
Hydraulics	INDS 107	*3 Cr.*

Summer Session

❑ Lab Science Requirement		*4 Cr.*
❑ Choose 1		
American Political System	POLI 240	*3 Cr.*
United States History to 1865	HIST 250	*3 Cr.*

(for HIST 251, swap with communications requirement)

Year 2

Fall Semester

❑ Industrial Networking	ATMN 175	*2 Cr.*
❑ Advanced PLC	ATMN 260	*3 Cr.*
❑ Industrial Automation I	ATMN 270	*3 Cr.*
❑ Choose 1		
Math for Everyday Life	MATH 101	*4 Cr.*
Introductory Statistics	MATH 190	*4 Cr.*

Spring Semester

❑ Industrial Automation II	ATMN 275	*3 Cr.*
❑ Automation Maintenance	ATMN 280	*3 Cr.*
❑ Industrial Automation Integration	ATMN 285	*3 Cr.*
❑ Humanities Requirement		*3-4 Cr.*
❑ Industrial Applied Right Angle and Oblique Trigonometry	INDS 127	*2 Cr.*

Total Minimum Credits: 60

*ATMN 110 requires knowledge of algebra and manipulation of variables. INDS 122 is a pre-requisite but may be allowed to enroll along with ATMN 110 depending on mathematics background. PLease contact Student Success Center with questions.

Academic Advising: You should meet with an academic counselor prior to registering for classes.

Note: Prerequisite courses may apply to this program. A minimum of 60 unduplicated credits (100 level or higher) are required for all associate degree programs.

Industrial Automation Maintenance, A.A.S.

24-25 catalog

Full-time course schedule

Description: This program is for students interested in robotics and their use in industrial settings. Students will learn concepts of electricity, programmable logic controllers, motors, hydraulics, robotics, and the integration of robotic systems.

Completion Time: 2 Years

This is suggested course sequencing. Please see a counselor or advisor for individual adjustments.

Year 1

Fall Semester

❑ **Success Skills for the 21st Century**	GNST 100	*3 Cr.*
❑ **Electrical Circuit Analysis***	ATMN 110	*3 Cr.*
❑ ***Freshman English I***	ENGL 100	*3 Cr.*
❑ **Industrial Applied Algebra**	INDS 122	*2 Cr.*
❑ ***Choose 1***		
American Political System	POLI 240	*3 Cr.*
United States History to 1865	HIST 250	*3 Cr.*
(for HIST 251, swap with communications requirement)		

Spring Semester

❑ **Industrial Motors and Controls**	ATMN 140	*4 Cr.*
❑ **Industrial Control Systems-Allen Bradley**	ATMN 160	*4 Cr.*
❑ **Industrial Applied Geometry**	INDS 124	*2 Cr.*
❑ ***Lab Science Requirement***		*4 Cr.*
❑ ***Communication Requirement***		*3 Cr.*

Year 2

Fall Semester

❑ **Industrial Networking**	ATMN 175	2 Cr.
❑ **Advanced PLC**	ATMN 260	3 Cr.
❑ **Industrial Automation I**	ATMN 270	3 Cr.
❑ **Choose 1**		
Pneumatics	INDS 106	3 Cr.
Hydraulics	INDS 107	3 Cr.
❑ **Choose 1**		
Math for Everyday Life	MATH 101	4 Cr.
Introductory Statistics	MATH 190	4 Cr.

Spring Semester

❑ **Industrial Automation II**	ATMN 275	*3 Cr.*
❑ **Automation Maintenance**	ATMN 280	*3 Cr.*
❑ **Industrial Automation Integration**	ATMN 285	*3 Cr.*
❑ ***Humanities Requirement***		*3-4 Cr.*
❑ **Industrial Applied Right Angle and Oblique Trigonometry**	INDS 127	*2 Cr.*

Courses in italics may be taken in the summer term.

Total Minimum Credits: 60

*ATMN 110 requires knowledge of algebra and manipulation of variables. INDS 122 is a pre-requisite but may be allowed to enroll along with ATMN 110 depending on mathematics background. PLease contact Student Success Center with questions.

Academic Advising: You should meet with an academic counselor prior to registering for classes.

Note: Prerequisite courses may apply to this program. A minimum of 60 unduplicated credits (100 level or higher) are required for all associate degree programs.

Industrial Automation Maintenance, A.A.S.

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Half-time course schedule

Description: This program is for students interested in robotics and their use in industrial settings. Students will learn concepts of electricity, programmable logic controllers, motors, hydraulics, robotics, and the integration of robotic systems.

Completion Time: 4.5 Years

This is suggested course sequencing. Please see a counselor or advisor for individual adjustments.

Year 1

Fall Semester

❑ Success Skills for the 21st Century	GNST 100	*3 Cr.*
❑ Industrial Applied Algebra	INDS 122	*2 Cr.*
❑ *Freshman English I*	ENGL 100	*3 Cr.*

Spring Semester

❑ Electrical Circuit Analysis*	ATMN 110	*3 Cr.*
❑ Industrial Applied Geometry	INDS 124	*2 Cr.*
❑ *Communication Requirement*		*3 Cr.*

Year 2

Fall Semester

❑ Industrial Motors and Controls	ATMN 140	*4 Cr.*
❑ *Choose 1*		
American Political System	POLI 240	*3 Cr.*
United States History to 1865	HIST 250	*3 Cr.*
(for HIST 251, swap with communications requirement)		

Spring Semester

❑ Industrial Control Systems-Allen Bradley	ATMN 160	*4 Cr.*
❑ Industrial Applied Right Angle and Oblique Trigonometry	INDS 127	*2 Cr.*

Year 3

Fall Semester

❑ Industrial Automation I	ATMN 270	*3 Cr.*
❑ Choose 1		
Pneumatics	INDS 106	*3 Cr.*
Hydraulics	INDS 107	*3 Cr.*

Spring Semester

❑ Industrial Automation II	ATMN 275	*3 Cr.*
❑ *Lab Science Requirement*		*4 Cr.*

Year 4

Fall Semester

❑ Industrial Networking	ATMN 175	*2 Cr.*
❑ Advanced PLC	ATMN 260	*3 Cr.*

Spring Semester

❑ Automation Maintenance	ATMN 280	*3 Cr.*
❑ Industrial Automation Integration	ATMN 285	*3 Cr.*

Year 5

Fall Semester

❑ *Choose 1*		
Math for Everyday Life	MATH 101	*4 Cr.*
Introductory Statistics	MATH 190	*4 Cr.*
❑ *Humanities Requirement*		*3-4 Cr.*

Academic Advising: You should meet with an academic counselor prior to registering for classes.

Note: Prerequisite courses may apply to this program. A minimum of 60 unduplicated credits (100 level or higher) are required for all associate degree programs.

*ATMN 110 requires knowledge of algebra and manipulation of variables. INDS 122 is a pre-requisite but may be allowed to enroll along with ATMN 110 depending on mathematics background. Please contact Student Success Center with questions.

Courses in italics may be taken in the summer term.

Total Minimum Credits: 60

Industrial Automation Maintenance, A.A.S.

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Full-time spring start course schedule

Description: This program is for students interested in robotics and their use in industrial settings. Students will learn concepts of electricity, programmable logic controllers, motors, hydraulics, robotics, and the integration of robotic systems.

Completion Time: 2 Years

This is suggested course sequencing. Please see a counselor or advisor for individual adjustments.

Year 1

Spring Semester

❑ **Success Skills for the 21st Century**	GNST 100	*3 Cr.*
❑ **Freshman English I**	ENGL 100	*3 Cr.*
❑ **Choose 1**		
Math for Everyday Life	MATH 101	*4 Cr.*
Introductory Statistics	MATH 190	*4 Cr.*
❑ **Choose 1**		
American Political System	POLI 240	*3 Cr.*
United States History to 1865	HIST 250	*3 Cr.*
(for HIST 251, swap with communications requirement)		

Fall Semester

❑ **Electrical Circuit Analysis***	ATMN 110	*3 Cr.*
❑ **Industrial Applied Algebra**	INDS 122	*2 Cr.*
❑ **Communication Requirement**		*3 Cr.*
❑ **Lab Science Requirement**		*4 Cr.*

*ATMN 110 requires knowledge of algebra and manipulation of variables. INDS 122 is a pre-requisite but may be allowed to enroll along with ATMN 110 depending on mathematics background. PLease contact Student Success Center with questions.

Year 2

Spring Semester

❑ **Industrial Motors and Controls**	ATMN 140	*4 Cr.*
❑ **Industrial Control Systems- Allen Bradley**	ATMN 160	*4 Cr.*
❑ **Industrial Applied Geometry**	INDS 124	*2 Cr.*
❑ **Choose 1**		
Pneumatics	INDS 106	*3 Cr.*
Hydraulics	INDS 107	*3 Cr.*

Fall Semester

❑ **Industrial Networking**	ATMN 175	*2 Cr.*
❑ **Advanced PLC**	ATMN 260	*3 Cr.*
❑ **Industrial Automation I**	ATMN 270	*3 Cr.*
❑ **Humanities Requirement**		*3-4 Cr.*

Year 3

Spring Session

❑ **Industrial Automation II**	ATMN 275	*3 Cr.*
❑ **Automation Maintenance**	ATMN 280	*3 Cr.*
❑ **Industrial Automation Integration**	ATMN 285	*3 Cr.*
❑ **Industrial Applied Right Angle and Oblique Trigonometry**	INDS 127	*2 Cr.*

Total Minimum Credits: 60

Academic Advising: You should meet with an academic counselor prior to registering for classes.

Note: Prerequisite courses may apply to this program. A minimum of 60 unduplicated credits (100 level or higher) are required for all associate degree programs.