Industrial Electronics Technology

Degree Type

Associate in Applied Science

ASSOCIATE DEGREE IN APPLIED SCIENCE INDUSTRIAL ELECTRONICS TECHNOLOGY 72 SEMESTER HOURS

When production workers encounter problems with the machines they operate, they call industrial technicians. Industrial technicians install, replace and repair equipment in industrial settings. Students in these options are prepared for industrial maintenance and industrial technician positions.

Industrial electronics technicians set up and service the electronic equipment that controls machines and production processes in industries. As facilities update and invest in new equipment to boost productivity and improve product quality, they increasingly rely on IETs to properly install and align industrial control systems and machinery. Preventive maintenance on such equipment as digital and microprocessor-based systems, programmable controls, motor drive systems, power systems and robotics is important and necessary to prevent production delays.

Industrial maintenance technicians are expected to troubleshoot malfunctions and perform preventive maintenance and emergency fixes on structures, equipment and facilities, and may do some carpentry and electrical work. Maintenance technicians are responsible for ensuring quality and safe production by guaranteeing smooth operation of equipment, including motors, pneumatic tools, conveyor systems and production machines as outlined in operations manuals, manufacturer's instructions and sketches.

Students in OCtech's IET and IMT programs receive a well-rounded education. Hands-on experience in technical courses gives students practical knowledge and further emphasizes concepts presented in the classroom. Classes in oral and written communications, computer skills, mathematics and interpersonal skills are also part of the required curriculum.

Fall I

| Course Number | Title | Credits |
|---------------|---------------------------|---------|
| EET-113 | Electrical Circuits I | 4 |
| IMT-131 | Hydraulics and Pneumatics | 4 |
| IMT-210 | Basic Industrial Skills I | 3 |
| MAT-101 | Beginning Algebra | 3 |
| ENG-160 | Technical Communications | 3 |

Spring I

| Course Number | Title | Credits |
|---------------|----------------------------|---------|
| EEM-165 | Resident/Commer Wiring | 4 |
| IMT-211 | Basic Industrial Skills II | 3 |
| MAT-102 | Intermediate Algebra | 3 |
| PSY-103 | Human Relations | 3 |
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Summer I

| Course Number | Title | Credits |
|---------------|----------------------------|---------|
| EEM-131 | Solid State Devices | 4 |
| EEM-230 | Digital Electronics | 4 |
| EEM-251 | Programmable Controllers | 3 |
| HSS-101 | Introduction to Humanities | 3 |

Fall II

| Course Number | Title | Credits |
|---------------|---------------------------------------|---------|
| EEM-252 | Programmable Controllers Applications | 3 |
| EEM-145 | Control Circuits | 3 |
| EEM-215 | DC/AC Machines | 3 |
| IMT-223 | Packing & Seals | 3 |
| EEM-140 | National Electrical Code | 3 |

Spring II

| Course Number | Title | Credits |
|---------------|----------------------------------|---------|
| EEM-235 | Power Systems | 3 |
| EEM-221 | DC/AC Drives | 3 |
| IMT-232 | Gear Boxes | 3 |
| IMT-230 | Reliability Centered Maintenance | 3 |
| IDS-112 | Employability Skills for Career | 1 |

Spring II (Co-Op Option)

EEM-204 SCWE in Residential/Commercial Electrical Technician replaces IMT-230.

| Total Credits | 72 |
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