

MECHATRONICS PATHWAY

Electro-Mechanical Technician

Description

Operate, test, maintain, or calibrate unmanned, automated, servo-mechanical, or electro-mechanical equipment. May operate unmanned submarines, aircraft, or other equipment at worksites, such as oil rigs, deep ocean exploration, or hazardous waste removal. May assist engineers in testing and designing robotics equipment.

- ◆ Growth Rate: 6.9% over the next four years
- ◆ 26% of the Electro-Mechanical Technicians are over the age of 55 and will probably retire soon. When older workers retire, there will be increasing demand for new workers.

Typical education level

- ◆ Associate's degree

Related Degrees

- ◆ Intro to Energy Production, Certificate
- ◆ Electrical Systems Technology, Degree
- ◆ Mechatronics Engineering Technology, Degree
- ◆ Electrical Systems Technology, Diploma
- ◆ Facilities Maintenance, Certificate
- ◆ Applied Electrical Technology AHR Controls, Certificate
- ◆ Applied Electrical Technology Electrical Design, Certificate
- ◆ Mechanical Engineering Technology, Degree

Similar Careers

Manufacturing Production Technician

Median Wage: \$29.31/hour or \$61k/year

Nanotechnology Engineering Technician

Median Wage: \$29.31/hour or \$61k/year

Photonics Technician

Median Wage: \$29.31/hour or \$61k/year

Computer-Controlled Machine Tool Operator

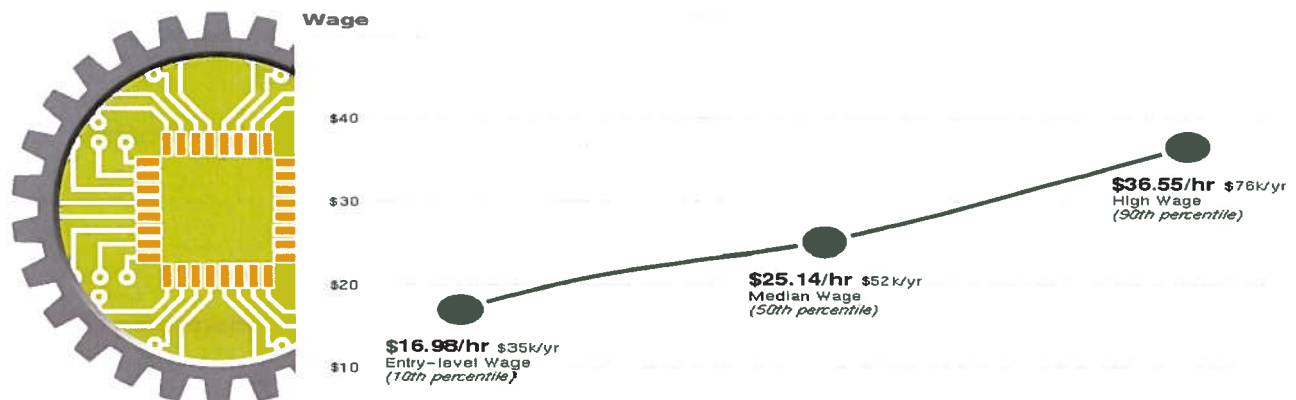
Median Wage: \$16.76/hour or \$35k/year

Electric Motor, Power Tool, and Related Repairer

Median Wage: \$17.97/hour or \$37k/year

Machinist

Median Wage: \$19.46/hour or \$40k/year



MECHATRONICS PATHWAY

Mechatronics combines the operations, skills and tools of mechanical engineering with those of electrical and computer engineering. Mechatronics is essential to keep industrial or production facility operation & control systems running. Mechatronics systems can be found in all aspects of modern life, from ATMs to medical devices to gas pumps, and cooling systems. Robots are parts of Mechatronics, as are micro devices, automotive sensors and flight control systems...There are lots of job opportunities available in this Region!

Please see below for list of Degree, Diploma and Certificate programs offered at the Community College near you.



- Computer-integrated Machining (Degree)
- Computer-integrated Machining (Diploma)
- Computer-integrated Machining (Certificates)**
- Electrical Engineering Technology (Degree)
- Electrical/Electronics Technology (Degrees)**
- Electrical/Electronics Technology (Diplomas)**
- Electrical/Electronics Technology (Certificates)**
- Applied Electrical Technology (Certificates)**
- Facilities Maintenance (Certificate)
- Solar PV/wind Installer (Certificate)
- Electronics Engineering Technology (Degree)
- Mechanical Engineering Technology (Degree)
- Mechanical Engineering Technology (Certificate)
- Mechatronics Engineering Technology (Degree)
- Mechatronics Engineering Technology (Certificates)**

For complete list of all awards offered please visit <http://www.cpcc.edu/programs/>



- Analog Electronics (Certificate)
- CAD Drafting (Certificate)
- Electronics Engineering Technology (Degree)
- Electrical Maintenance (Certificate)
- Electrical Systems Technology (Degree)
- Electrical Systems Technology (Diploma)
- Electrical Systems Technology (Certificate)
- Embedded Microprocessor Design (Certificate)
- Manufacturing (Certificate)
- Mechanical Engineering Technology (Degree)
- Mechanical Fabrication (Certificate)
- Machining Certificate (Certificate)
- Mechatronics Engineering Technology (Degree)
- Robotics (Diploma)
- Robotics (Certificate)

For complete list of all awards offered please visit <https://mitchellcc.edu/engineering-and-construction-technology>



- Computer-Integrated Machining (Degree)
- Computer-Integrated Machining (Diploma)
- Computer-Integrated Machining (Certificates)**
- Electrical Systems Technology (Degree)
- Electrical Systems Technology (Diploma)
- Electrical Systems Technology - (Certificates)**
- Electronics Engineering Technology (Degree)
- Electronics Engineering Technology (Diploma)
- Electronics Engineering Technology (Certificate)
- Industrial Systems Technology (Degree)
- Industrial Systems Technology (Diploma)
- Industrial Systems Technology (Certificates)**
- Mechanical Engineering Technology (Degree)
- Mechanical Engineering Technology (Diploma)
- Manufacturing Technology (Degree)
- Mechatronics Engineering Technology (Degree)
- Mechatronics Engineering Technology (Certificate)

For complete list of all awards offered please visit <http://www.gaston.edu/engineering-industrial-technologies/>



- Electronics Engineering Technology (Degree)
- Electronics Engineering Technology - Mechatronics (Certificate)
- Electronics Engineering Technology - CCP
- Computer-Integrated Machining (Degree)
- Computer-Integrated Machining (Diploma)
- Computer-Integrated Machining (Certificates)**
- Computer-Integrated Machining - CCP

For complete list of all awards offered please visit <https://www.stanly.edu/advanced-manufacturing-and-industrial-technology>



- Electrical Systems Technology (Degree)
- Electrical Systems Technology, Hydro-Mechanical (Degree)
- Electrical Systems Technology (Diploma)
- Electrical Systems Technology (Certificates)**
- Industrial Systems Technology (Degree)
- Industrial Systems Technology, Machining (Degree)
- Industrial Systems Technology (Certificates)**
- Mechanical Engineering Technology (Degree)
- Mechanical Engineering Technology Certificate
- Mechatronics Engineering (Degree)

For complete list of all awards offered please visit <http://www.spcc.edu/programs-and-courses/>



- Computer-Integrated Machining (Degree)
- Computer-Integrated Machining (Diploma)
- Computer-Integrated Machining (Certificates)**
- Electronics Engineering Technology (Degree)
- Electronics Engineering Technology (Diploma)
- Electronics Engineering Technology (Certificates)**
- Industrial Engineering Technology (Degree)
- Industrial Engineering Technology (Diploma)
- Industrial Engineering Technology (Certificates)**
- Mechanical Drafting Technology (Certificate)
- Mechanical Engineering Technology (Degree)
- Mechanical Engineering Technology (Diploma)
- Mechatronics (Certificate)

For complete list of all awards offered please visit <https://www.rccc.edu/beeps/advanced-manufacturing-engineering/>

****More than one specialized options available.**

NURSING PATHWAY

Registered Nurse (RN)

What They Do

Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required.

Typical Tasks:

- Monitor, record, and report symptoms or changes in patients' conditions.
- Maintain accurate, detailed reports and records.
- Record patients' medical information and vital signs.
- Order, interpret, and evaluate diagnostic tests to identify and assess patient's condition.
- Inform physician of patient's condition during anesthesia.
- Modify patient treatment plans as indicated by patients' responses and conditions.
- Administer local, inhalation, intravenous, or other anesthetics.
- Direct or supervise less-skilled nursing or healthcare personnel or supervise a particular unit.
- Consult and coordinate with healthcare team members to assess, plan, implement, or evaluate patient care plans.
- Monitor all aspects of patient care, including diet and physical activity.

Growth Rate: This career has grown by 3% over the last 2 years, and is expected to grow by 8% over the next 10 years. Currently 29,523 Registered Nurses are employed in the region. There are 7,257 Registered Nurses who are age 55 and older. They will likely retire within the next 10 years, creating a demand for new workers.

Typical Education Level

Associate's degree

Related Degrees

Associate Degree in Nursing (ADN)
Bachelor of Science in Nursing (BSN)

Similar Careers

Critical Care Nurse (\$60k/yr)
Licensed Practical (LPN) and Licensed Vocational Nurse (\$42k/yr)
Physical Therapist (\$83k/yr)
Acute Care Nurse (\$60k/yr)
Athletic Trainer (\$41k/yr)
Midwife (\$60k/yr)
Nurse Midwife (\$102k/yr)

How well does it pay?

Normal pay for Registered Nurses is \$60,148 per year. That is about \$5,012 per month, or \$28.92 per hour. New workers generally start around \$44,265, while highly experienced workers can earn as much as \$80,328.

Wage



All data derived from EMSI Career Coach, 2018 for the Charlotte & surrounding areas within 50 miles radius

NURSING PATHWAY

Please see below for list of Nursing and Health Care related training programs offered at community colleges & universities near you

CENTRAL PIEDMONT COMMUNITY COLLEGE

<http://www.cpcc.edu/programs/>

Associate Degree in Nursing [ADN]
Cardiovascular Technology [Degree]
Emergency Medical Science [Degree]
Health Information Technology [Degree]
Medical Assisting [Diploma]
Medical Assisting [Degree]
Medical Laboratory Technology [Degree]
Medical Office Administration [Degree]
Nurse Aide [Certificate]
Occupational Therapy Assistant [Degree]
Pharmacy Technology [Diploma]
Pharmacy Technology [Degree]
Phlebotomy [Certificate]
Physical Therapist Assistant [Degree]
Respiratory Therapy [Degree]
Surgical Technology [Degree]

MITCHELL COMMUNITY COLLEGE

<https://mitchellcc.edu/health-sciences>

Associate Degree in Nursing [ADN]
Dietetic Technician [Degree]
Health Information Technology [Degree]
Medical Assisting [Degree]
Medical Assisting [Diploma]
Medical Laboratory Technology [Degree]
Nurse Aide [Certificate]
Pharmacy Technician [Certificate]
Phlebotomy [Certificate]

PFEIFFER UNIVERSITY

<http://www.pfeiffer.edu/>

Bachelor of Science in Nursing Degree [BSN]
Master of Health Administration Degree [MHA]
Medical Practice Management [Certificate]
Master of Science in Physician Assistant [MS-PAS]

NORTHEASTERN UNIVERSITY / Charlotte

<https://www.northeastern.edu/charlotte/>

Accelerated Bachelor of Science in Nursing Degree [BSN]
Master of Science in Health Informatics [Degree]
Doctor of Nursing Practice [DNP]

GASTON COLLEGE

<http://www.gaston.edu/health-human-services/>

Associate Degree in Nursing [ADN]
- RIBN program option
- RN to BSN Pathway option
Dietetic Technician [Degree]
Emergency Medical Science - Paramedic [Degree]
Emergency Medical Science [Certificate]
Medical Assisting [Degree]
Nurse Aide [Certificate]
Phlebotomy [Certificate]
Practical Nursing [Diploma]
- LPN to RN option [Degree]
Therapeutic and Diagnostic Services - Nurse Aide [Diploma]

STANLY COMMUNITY COLLEGE

<https://www.stanly.edu/future-students/academicsprograms>

Associate Degree in Nursing [ADN]
LPN to RN option [Degree]
Emergency Medical Science [Degree]
Medical Assisting [Degree]
Medical Assisting [Diploma]
Medical Assisting [Certificate]
Medical Laboratory Technology [Degree]
Nurse Aide [Certificate]
Pharmacy Technology [Degree]
Pharmacy Technology [Diploma]
Phlebotomy [Certificate]
Radiography [Degree]
Respiratory Therapy [Degree]

UNC CHARLOTTE

<https://nursing.uncc.edu/>

Bachelor of Science in Nursing Degree [BSN]
Master of Science in Nursing Degree [MSN]
Graduate/Post-Master's Certificates
Doctor of Nursing Practice [DNP]
Health Sciences Research [PHD]

SOUTH PIEDMONT COMMUNITY COLLEGE

<http://spcc.edu/programs-and-courses/health-programs/>

Associate Degree in Nursing [ADN]
Medical Assisting [certificate]
Medical Sonography [Degree]
EMT Basic [Certificate]
EMT Paramedic [Certificate]
Nurse Aide [Certificate]
Pharmacy Technician [Certificate]
Phlebotomy [Certificate]
Practical Nursing [Diploma]

ROWAN CABARRUS COMMUNITY COLLEGE

<https://www.rccc.edu/healtheducation/healthcare/>

Associate Degree in Nursing [ADN]
EMT Basic [Certificate]
Emergency Medical Science [Degree]
Medical Coding [Certificate]
Medical Office Administration [Diploma]
Medical Office Administration [Degree]
Nurse Aide [Certificate]
Occupational Therapy Assistant [Degree]
Pharmacy Technician [Certificate]
Phlebotomy [Certificate]
Physical Therapist Assistant [Degree]
Radiography [Degree]

CABARRUS COLLEGE OF HEALTH SCIENCES

<https://www.carolinashealthcare.org/education/cabarrus-college-of-health-sciences>

CAROLINAS COLLEGE OF HEALTH SCIENCES

<https://www.carolinashealthcare.org/education/Carolinas-College-of-Health-Sciences>

CATAWBA COLLEGE

<http://catawba.edu/academics/schools/arts-sciences/nursing/>

QUEENS UNIVERSITY

<http://www.queens.edu/academics/schools-colleges/presbyterian-school-of-nursing.html>

WINGATE UNIVERSITY

<https://www.wingate.edu/majors-programs/nursing/nursing-major/>

