**Aerospace Engineering**
Aerospace engineers design aircraft and propulsion systems, and study the aerodynamic performance of aircraft. Concentrations available in Aeronautics, Astronautics, and Autonomous Vehicle Systems.

- Career Information
- Advising Guide

  - MAPP (Maricopa to ASU Pathways Program)
    - ASU Aeronautics Concentration
    - ASU Astronautics Concentration
    - ASU Autonomous Vehicle System

- Major Map and Degree Information
  - ASU Aeronautics Concentration
    [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESAEROBSE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESAEROBSE/undergrad/false)
  - ASU Astronautics Concentration
    [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESAEASBSE/undergrad/false?init=false&nopassive=true](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESAEASBSE/undergrad/false?init=false&nopassive=true)
  - ASU Autonomous Vehicle System
    [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESAEAVSBSE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESAEAVSBSE/undergrad/false)

**Biomedical Engineering**
Biomedical engineers design and create equipment and devices used in healthcare.

- Career Information
  [http://www.bls.gov/ooh/architecture-and-engineering/biomedical-engineers.htm](http://www.bls.gov/ooh/architecture-and-engineering/biomedical-engineers.htm)
- Advising Guide

  - MAPP (Maricopa to ASU Pathways Program)
    - ASU Biomedical Engineering
Chemical Engineering
Chemical Engineers apply the principals of chemistry, biology, physics and mathematics to solve problems involving the production of chemicals, fuel, drugs, food, and many other products.

- Career Information
  - Chemical Engineering
    [http://www.bls.gov/ooh/architecture-and-engineering/chemical-engineers.htm](http://www.bls.gov/ooh/architecture-and-engineering/chemical-engineers.htm)

- MAPP (Maricopa to ASU Pathways Program)
  - ASU Chemical Engineering

Civil Engineering
Civil engineers provide cost estimates for materials and labor to determine a project’s economic feasibility. Concentrations available in Environmental Engineering and Sustainable Engineering.

- Career Information
  - Civil Engineering
    [http://www.bls.gov/ooh/architecture-and-engineering/civil-engineers.htm](http://www.bls.gov/ooh/architecture-and-engineering/civil-engineers.htm)

- MAPP (Maricopa to ASU Pathways Program)
  - ASU General Civil Engineering
  - ASU Environmental Engineering
  - ASU Sustainable Engineering

- Major Map and Degree Information
  - ASU General Civil Engineering
    [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESCEEBSE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESCEEBSE/undergrad/false)
  - ASU Environmental Engineering
    [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESCEEBSITE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESCEEBSITE/undergrad/false)
  - ASU Sustainable Engineering
    [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESCEESUBSE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESCEESUBSE/undergrad/false)
**Computer Systems Engineering**
Computer and information research scientists study and solve complex problems in computing. Concentrations available in Information Assurance and Software Engineering.

- **Career Information**
  - Computer Systems Engineering

- **MAPP (Maricopa to ASU Pathways Program)**
  - ASU Computer Systems Engineering (Information Assurance)

- **Major Map and Degree Information**
  - ASU Computer Systems Engineering (Information Assurance)
    - [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESCSEIBS/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESCSEIBS/undergrad/false)

**Construction Engineering**
Construction engineers work at the interface of civil engineering design and construction management typically in the development of infrastructures.

- **Career Information**

- **MAPP (Maricopa to ASU Pathways Program)**

- **Major Map and Degree Information**
  - [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESCONBSE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESCONBSE/undergrad/false)

**Electrical Engineering**
Electrical engineers design, develop, test, and supervise the manufacturing of electrical equipment, such as electric motors, radar and navigation systems, communications systems, and power generation equipment. Concentrations available in Electric Power and Energy Systems.

- **Career Information**
  - Electrical Engineering

- **MAPP (Maricopa to ASU Pathways Program)**
  - ASU Electrical Engineering

- **Major Map and Degree Information**
  - ASU Electrical Engineering
    - [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESEEBSE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESEEBSE/undergrad/false)
**Industrial Engineering**
Industrial engineers review production schedules, engineering specifications, and process flows to understand activities in manufacturing and services.

- **Career Information**
  - Industrial Engineering
- **MAPP (Maricopa to ASU Pathways Program)**
  - ASU Industrial Engineering
- **Major Map and Degree Information**
  - ASU Industrial Engineering
    [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESIEEBSE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESIEEBSE/undergrad/false)

**Materials Science Engineering**
Materials engineers develop, process and test materials used to create a range of products.

- **Career Information**
  - Materials Science
- **MAPP (Maricopa to ASU Pathways Program)**
  - ASU Materials Science
- **Major Map and Degree Information**
  - ASU Materials Science
    [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESMSEBSE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESMSEBSE/undergrad/false)

**Mechanical Engineering**
Many mechanical engineers work in industries that manufacture machinery or automotive parts. Concentrations available in Computational Mechanics and Energy and the Environment.

- **Career Information**
  - Mechanical Engineering
- **MAPP (Maricopa to ASU Pathways Program)**
  - ASU Mechanical Engineering
  - ASU Mechanical Engineering (Computational Mechanics)
- **Major Map and Degree Information**
  - ASU Mechanical Engineering
    [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESMAEMBSE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESMAEMBSE/undergrad/false)
  - ASU Mechanical Engineering (Computational Mechanics)
    [https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESMAECBSE/undergrad/false](https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/ESMAECBSE/undergrad/false)
Undecided Engineering
Engineers collaborate on transdisciplinary teams to design, manufacture and deliver innovative technological products and services.

- Career Information
  - Engineering

- MAPP (Maricopa to ASU Pathways Program)
  - ASU Engineering

- Major Map and Degree Information
  - ASU Engineering
Aerospace Engineering
  • http://engineering.arizona.edu/majors/aerospace

Architectural Engineering
  • http://engineering.arizona.edu/majors/architectural

Biomedical Engineering
  • http://engineering.arizona.edu/majors/biomedical

Biosystems Engineering
  • http://engineering.arizona.edu/majors/biosystems

Chemical Engineering
  • http://engineering.arizona.edu/majors/chemical

Civil Engineering
  • http://engineering.arizona.edu/majors/civil

Electrical & Computer Engineering
  • http://engineering.arizona.edu/majors/electricalcomputer

Environmental Engineering
  • http://engineering.arizona.edu/majors/environmental

Industrial Engineering
  • http://engineering.arizona.edu/majors/industrial

Materials Science & Engineering
  • http://engineering.arizona.edu/majors/materialscience

Mechanical Engineering
  • http://engineering.arizona.edu/majors/mechanical

Mining Engineering
  • http://engineering.arizona.edu/majors/mining

Optical Sciences & Engineering
  • http://engineering.arizona.edu/majors/opticalscience

Systems Engineering
  • http://engineering.arizona.edu/majors/systemsengineering
NORTHERN ARIZONA UNIVERSITY

Applied Computer Science
- Applied Computer Science
  http://catalog.nau.edu/Catalog/details?plan=ACSBSX&catalogYear=1718

Civil Engineering
- Civil Engineering
  http://catalog.nau.edu/Catalog/details?plan=CIEGRBSEX&catalogYear=1718

Computer Science
- Computer Science
  http://catalog.nau.edu/Catalog/details?plan=CSBSCSX&catalogYear=1718

Electrical Engineering
- Electrical Engineering
  http://catalog.nau.edu/Catalog/details?plan=EEBSEX&catalogYear=1718
- Electrical Engineering, Computer Engineering Emphasis
  http://catalog.nau.edu/Catalog/details?plan=EEBSEX&catalogYear=1718
- Electrical Engineering, Electrical Engineering Emphasis
  http://catalog.nau.edu/Catalog/details?plan=EEBSEX&catalogYear=1718

Environmental Engineering
- Environmental Engineering
  http://catalog.nau.edu/Catalog/details?plan=ENEGRBSEX&catalogYear=1718

Mechanical Engineering
- Mechanical Engineering
  http://catalog.nau.edu/Catalog/details?plan=MEEGRBSEX&catalogYear=1718
GRAND CANYON UNIVERSITY

Program Information

https://www.gcu.edu/degree-programs/bachelor-science-electrical-engineering
https://www.gcu.edu/degree-programs/bachelor-science-electrical-engineering-technology
https://www.gcu.edu/degree-programs/bachelor-science-engineering
https://www.gcu.edu/degree-programs/bachelor-science-engineering-robotics
https://www.gcu.edu/degree-programs/bachelor-science-mechanical-engineering
https://www.gcu.edu/degree-programs/bachelor-science-mechanical-engineering-technology
https://www.gcu.edu/degree-programs/bachelor-science-biomedical-engineering

Pre-Engineering Pathways

Biomedical Engineering:

https://www.gcu.edu/Documents/Maricopa_GCU%20Pre-Engineering%20Pathway.BS%20Biomedical%20Engineering.pdf

Electrical Engineering:


Engineering:


Engineering with an emphasis in Robotics:


Mechanical Engineering:

EMRY RIDDLE UNIVERSITY

Aerospace Engineering
- Aerospace Engineering
  https://erau.edu/degrees/bachelor/aerospace-engineering/

Civil Engineering
- Civil Engineering
  https://erau.edu/degrees/bachelor/civil-engineering/

Computer Engineering
- Computer Engineering
  https://erau.edu/degrees/bachelor/computer-engineering/

Electrical Engineering
- Electrical Engineering
  https://erau.edu/degrees/bachelor/electrical-engineering/

Engineering
- Engineering
  https://erau.edu/degrees/bachelor/engineering/

Engineering Physics
- Engineering Physics
  https://erau.edu/degrees/bachelor/engineering-physics/

Engineering Technology
- Engineering Technology
  https://erau.edu/degrees/bachelor/engineering-technology/

Mechanical Engineering
- Mechanical Engineering
  https://erau.edu/degrees/bachelor/mechanical-engineering/

Software Engineering
- Software Engineering
  https://erau.edu/degrees/bachelor/software-engineering/