



Career

UC students can choose to complete a minor alongside Mechanical Engineering in either:

- Aerospace Engineering
- Biomedical Engineering

For more information, visit:

W a s h i n g t o n

ad a e d

Graduates with this degree are employed in a range of jobs — see some examples below.

Note: This list is not exhaustive, and some jobs may require further study, training or experience. It is recommended to start with the section 'How can I gain a sense of career direction?'

M e c a n i c a l

- Investigate and optimise the use of energy, machinery and materials for specific applications
- Design products and manufacturing processes
- Advise on the design, fabrication and repair of equipment, products and services

A i r c r a f t m a i n t e n a n c e

- Ensure safe flight performance of aircraft
- Investigate aircraft faults and defects and approve maintenance and repair processes
- Oversee aircraft design and/or modification
- Test aircraft parts and systems
- Check that regulations and requirements are met

D e s i g n, c o n s t r u c t i o n

- Use software to develop new product ideas
- Advise clients on plans and budgets
- Liaise with suppliers and manufacturers
- Design and test prototypes

P r o d u c t i o n

- Plan, manage and implement the control of a manufacturing process which turns raw materials into an end product
- Ensure the company creates goods efficiently, cost-effectively and to a precise standard
- Set budgets, timeframes, and supervise staff

O p e r a t i o n a l

- Develop, install and restore products
- Deal with fabrication processes
- Ensure quality of product/production according to standards, specifications and tolerances

S o f t w a r e

- Analyse customer needs, evaluate computer software and research new technologies
- Identify solutions and develop software programs for new products or enhancements

I n d u s t r i a l

- Design a range of robotics, sensors, actuators and smart products for varied application e.g. medicine, electronics, farming
- Set up and monitor dynamic systems
- Conduct experiments in product design and safety

E n e r g y / T e r m o t e c h n i c a l

- Design and develop energy-efficient processes
- Effectively analyse and resolve thermo-technical issues of facilities

C a r e e r

- Plan, manage and supervise projects
- Conduct feasibility studies, prepare estimated costs, and help secure patents
- Find solutions to problems
- Ensure legal obligations are met

Q u a l i t y, r e s e a r c h

- Design tests to check software/systems/ processes/products
- Identify issues, defects or bugs, and fix them

P r o j e c t m a n a g e m e n t

- Manage project plans, timelines, costs, compliance
- Manage procurement, purchasing, contracts
- Liaise with project staff and clients

T e a c h i n g /

- Prepare and give lectures and tutorials
- Set and mark assignments and exams
- Conduct research, write and publish articles

E x a m p l e c a r e e r s:

- Research engineer
- Acoustic Engineer
- Chief technology officer
- Heavy vehicle engineer
- Industrial engineer
- Intellectual property engineer
- Maintenance engineer
- Marine engineering officer
- Materials engineer
- Propulsion Engineer.

F u r t h e r s t u d y

Further study options for Mechanical Engineering are available from postgraduate certificate to master's and PhD levels. Expertise can also be developed in areas such as product design, manufacturing, building services, power generation, transportation, and medical technologies.

Further study may facilitate career benefits such as specialist skills, entry into a specific occupation, higher starting salary, faster progression rate, and advanced research capability.

It is important to determine which, if any,

