

Bellringer #3

What do you want to do for a career? If you are not sure yet, name a few careers that interest you at the moment.

Careers in Drafting

Today's Work Flow

1

Career Fields
with Drafting

2

Basic Drafting
Jobs

3

Branches of
Engineering

4

Career
Research
Activity

Drafting is
used in many
careers:

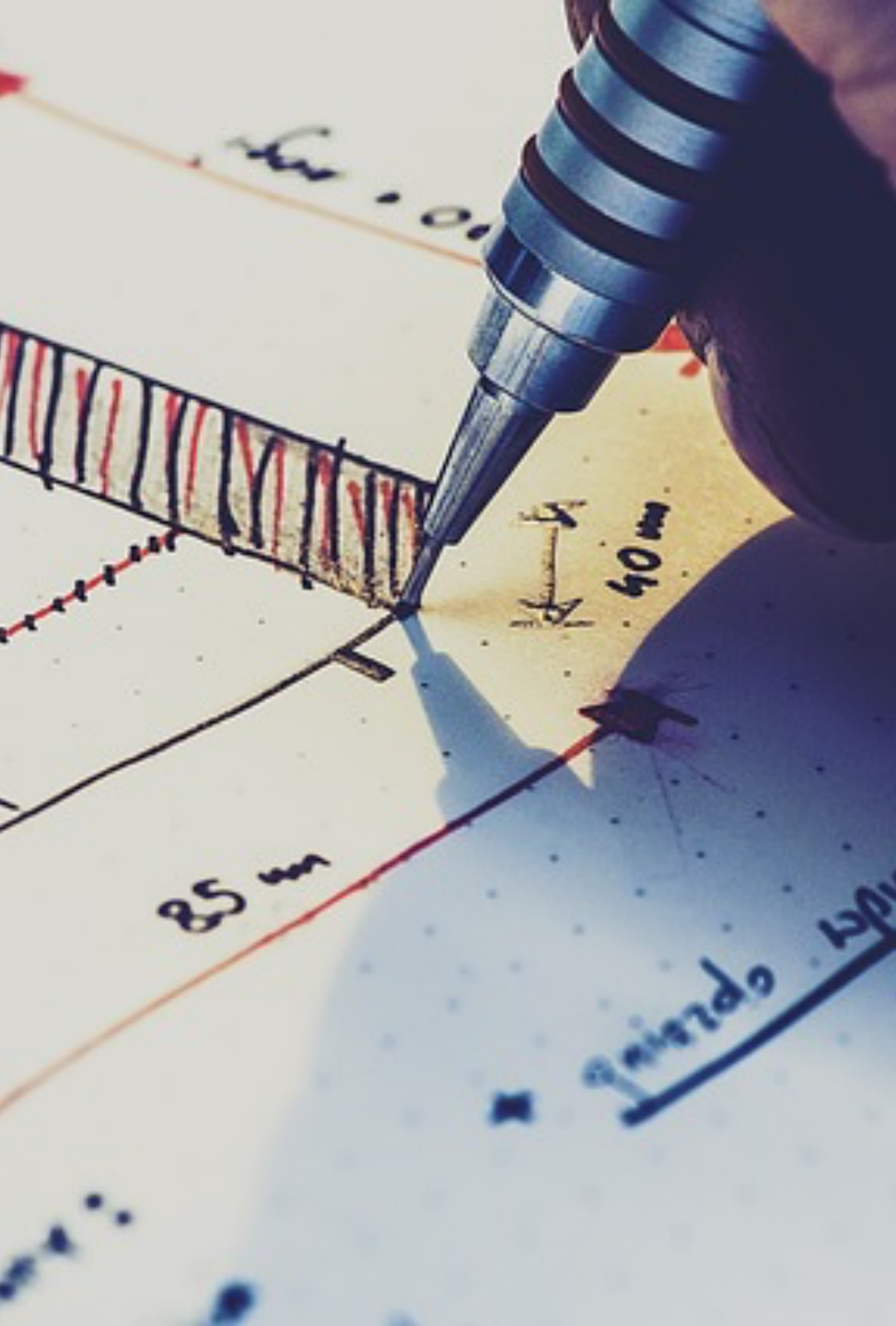
- Engineer
- Manufacturing/Fabrication
- Electrical
- Transportation
- Construction
- Architecture
- Public Utilities
- State and Local Government
- Armed Services
- College and Universities

Basic Drafting Jobs



Drafter Trainee

- Assists with drawing preparation and performs support tasks
- Typically requires high school diploma including drafting classes and/or apprenticeships during high school



Junior Drafter

- Prepares drawings under direction of drafting technician or senior detailer
- Typically requires at least one year of high school drafting and an associate degree in drafting technology

Drafting Technician (Drafter)

- Prepares drawings with less supervision than a Junior Drafter
- Typically requires an associate degree in drafting technology and one year of drafting experience



Design Drafting Technician

- Combines design and drafting skills, interpretation of designer's sketches and engineer's details
- Typically requires an associate degree in drafting technology and one year of drafting experience

Designer

- Works with engineers and drafters to turn conceptual design into usable production drawings and specifications
- Typically requires an associate degree and at least five years industrial experience, knowledge of design process and drawing requirements



Checker

- Experienced drafter who checks drawings created by drafting technicians for accuracy and completeness
- Typically requires an associate degree and at least five years industrial experience, detailed knowledge of design process and drawing requirements

Senior Detailer

- Especially skilled in understanding details of how things work and go together, capable of detailing complex parts and making details understandable
- Typically requires an associate degree and at least five years industrial experience, knowledge of drawing requirements

Engineer

Has at least a four-year degree in an engineering specialty

Must be licensed by the states in which they operate

Uses technical drawings to communicate ideas and products for manufacturing or construction

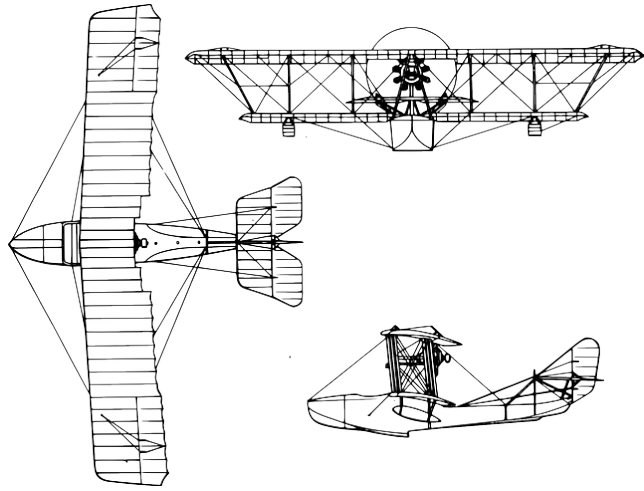
Many specialized branches



Engineer (Continued)

- Most major corporations employ a complete engineering design team which includes:
 - Research and development personnel
 - Development engineer
 - Project engineer
 - Design engineer
 - Technical illustrator

Branches of Engineering

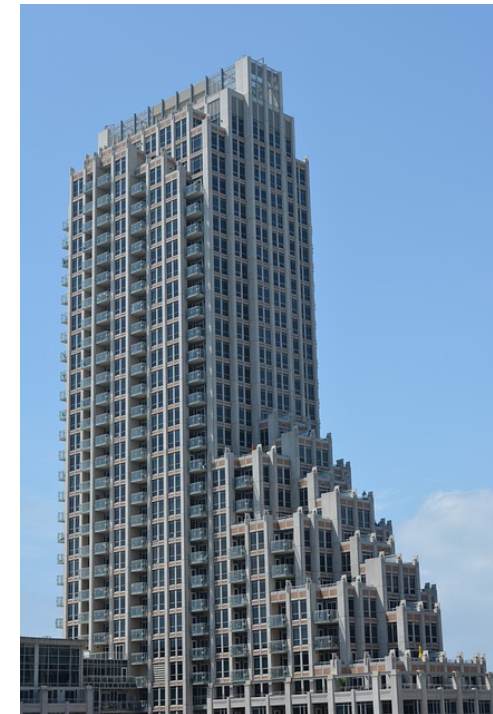
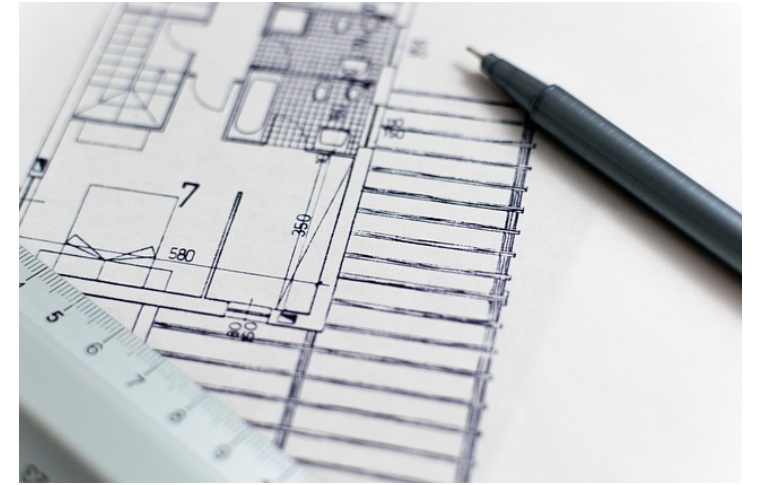


Aerospace Engineering

- Designs aircraft for NASA, public transportation and military applications.
- May work with sub-systems, such as electrical, mechanical, structural, etc.

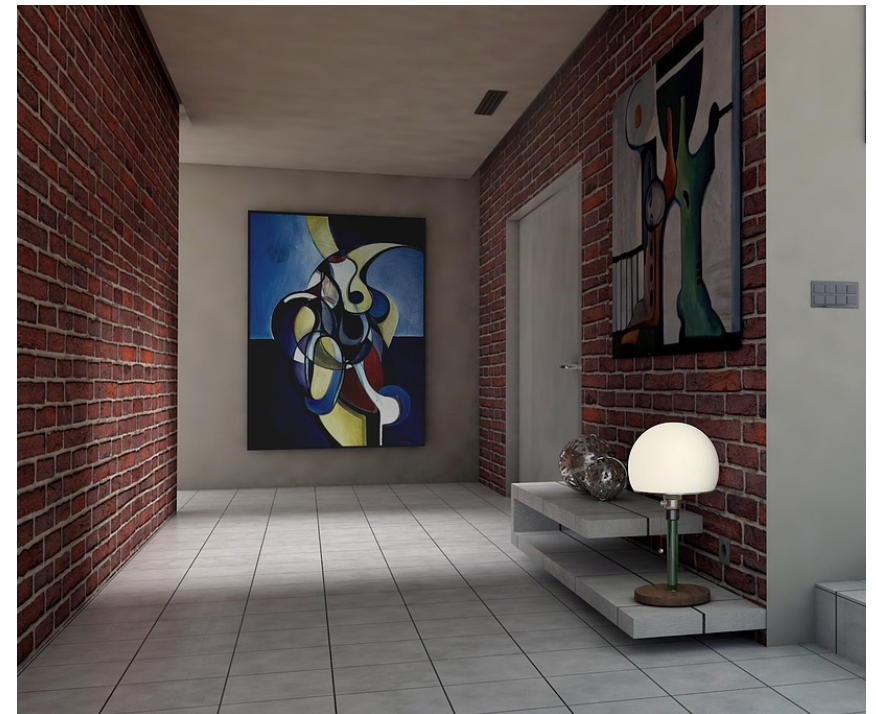
Architecture

- Interest in building and construction
- Typically, Architects and Architectural Designers have a four or five-year degree and must be licensed by the states in which they operate



Architecture (Continued)

- Areas of specialty within Architecture include:
 - Landscape architects
 - City planners
 - Interior designers



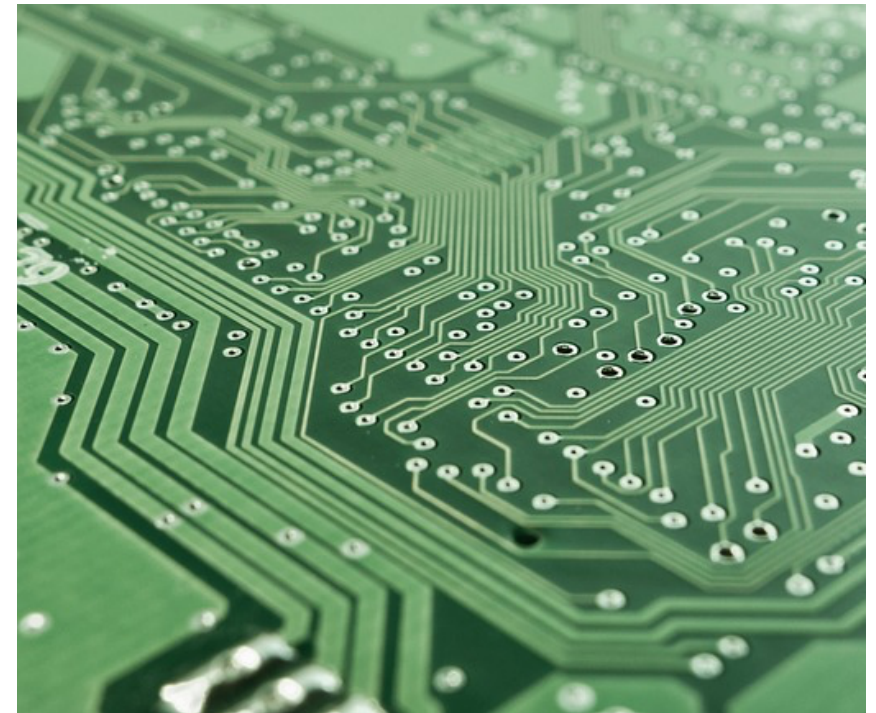


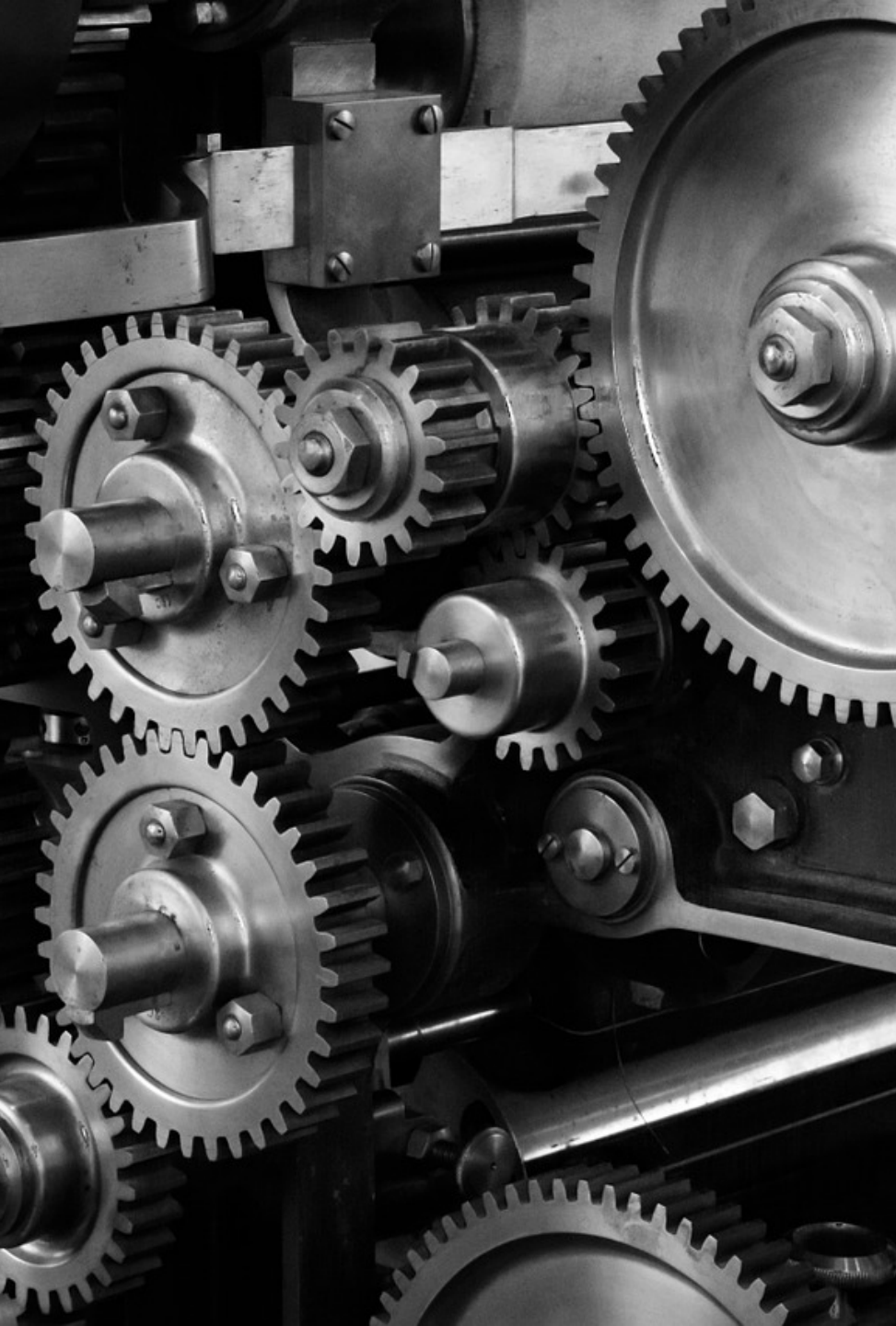
Civil Engineering

- Designs structures, environmental systems, and various construction projects.
- Arguably the oldest engineering profession.
- Complete analysis and design for materials and structural systems for buildings, aircraft, etc.

Electrical Engineering

- Designs electric power devices, controls, mechanisms, and electrical systems.
- Works with power transmission, analog and digital circuits, and communications.





Mechanical Engineering

- Focuses on the design, construction, and use of machines.
- Analyzes materials, solid and fluid mechanics, thermodynamics, heat transfer, control, instrumentation, design, and manufacturing to understand mechanical systems.

Career Research Activity

Choose a career that we discussed in class today. Once you have your career, answer the following questions:

- Educational requirements for the job
- Average salary
- What the average day looks like for someone in this position
- A company located in Raleigh that has this position
- Why you chose this career