

# Concepts of Engineering and Technology

## *Scope and Sequence*

### Course Modules -

- Module 1- Introduction to innovation
- Module 2- Introduction to the R&D industry
- Module 3- Introduction to the R&D loop
- Module 4- Mechanical Engineering (CDR)
- Module 5- Problem-solving skills  
(Activities)
- Module 6- Structural Engineering  
(Structure design, build, test, analysis; CDR)
- Module 7- Teamwork skills  
(Ethics, Activities)
- Module 8- Civil Engineering (CDR)
- Module 9- Leadership skills  
(Ethics, Activities)
- Module 10- BioEngineering  
(CDR)
- Module 11- Electrical Engineering  
(DC series/parallel circuits' development, test, analysis; CDR)
- Module 12- Production  
(CDR)
- Module 13- Fluids Engineering  
(CDR)
- Module 14- Aerospace Engineering  
(CDR)
- Module 15- Introduction to Manufacturing

[Career visits can occur after each Engineering Module (EM); however, to help reduce cost of travel and time away from classes, EM career visits can be combined – i.e. Modules 4&6, Modules 12&13, and Modules 14&15.]