

## Integrated Innovation Institute

### Master of Science in Technology Ventures Applied Engineering Courses – Fall 2021

#### Biomedical Engineering

42-611, Engineering Biomaterials

42-612, Tissue Engineering (Crosslisted with 27720)

42-649, Introduction to Biomechanics (Crosslisted with 24664)

42-691, Biomechanics of Human Movement (Crosslisted with 24663) (9 units)

42-675, Fundamentals of Computational Biomedical Engineering

42-677, Rehabilitation Engineering (9 units)

42-744, Medical Devices

#### Civil and Environmental Engineering

12-704, Probability & Estimation Methods for Engineering Systems

17-706, Civil Systems Investment Pricing & Planning

12-740, Data Acquisition (\*6 unit mini)

12-741, Data Management (\*6 unit mini)

12-783, Geographic Information Systems

#### Chemical Engineering

06-609, Physical Chemistry of Macromolecules (\*9 Units)

06-635, Production & Supply Chain Optimization

06-704, Advanced Heat & Mass Transfer

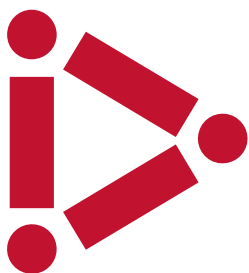
06-705, Advanced Chemical Engineering Thermodynamics

06-713, Mathematical Techniques in Chemical Engineering

#### Electrical & Computer Engineering

18-613, Foundations of Computer Systems

18-631, Introduction to Information Security



18-638, Mobile & IoT Security  
18-645, How to Write Fast Code  
18-650, Policies of Wireless Systems  
18-730, Introduction to Computer Security  
18-734, Foundation of Privacy  
18-785, Data Inference, and Applied Machine Learning  
18-794, Pattern Recognition Theory

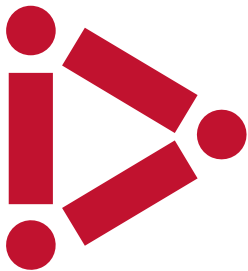
### **Materials Science and Engineering**

27-700, Energy Storage Materials & Systems (Crosslisted with 26443)  
27-702, Metal Environment Reactions  
27-703, Additive Manufacturing and Materials  
27-706, Hard and Superhard Materials (\*6 unit mini)  
27-709, Engineering Biomaterials  
27-720, Tissue Engineering (Crosslisted with 42612)  
27-700, Energy Storage Materials & Systems (Crosslisted with 24-643)

### **Mechanical Engineering**

24-632, Special Topics: Additive Manufacturing and Product Development  
24-643, Energy Storage Materials & Systems (Crosslisted with 27-700)  
24-663, Special Topics: Biomechanics of Human Movement (Crosslisted with 42691)  
24-664, Introduction to Biomechanics (Crosslisted with 42649)  
24-671, Special Topics: Electromechanical Systems Design  
24-672, Special Topics in DIY Design and Fabrication  
24-678 Special Topics: Computer Vision for Engineers  
24-679 Special Topics: Designing & Deploying AI/ML Systems  
24-682, Design for the Fourth Industrial Revolution  
24-683, Design for Manufacture and the Environment  
24-787, Machine Learning and Artificial Intelligence for Engineers

### **School of Computer Science**



16-861, Space Robotics

**ETIM**

19-707, Multiple Criteria & Decision Making

Last updated: 08/30/2021

**Carnegie  
Mellon  
University**



integrated  
innovation  
institute

**PITTSBURGH**

4612 Forbes Ave • Pittsburgh, PA • 15213

**SILICON VALLEY**

NASA Ames Research Park • Bldg. 23 (MS 23-11)  
Moffett Field, CA • 94035

**ENGINEERING + DESIGN + BUSINESS**  
[cmu.edu/iii](http://cmu.edu/iii)