

## Capstone Project (6 credits)

Capstone Project [6] ENER4920

## Tech. Comm. (6 credits)

Tech. Comm. II [3] LANG4035 F/S

Tech. Comm. I [3] LANG2030 F/S

## Introduction (3 credits)

Introduction to Sustainability [3] SUST1000 OR F/S  
Energy System for Sustainable World [3] MECH1902 F  
Introduction to Environmental Eng [3] CENG1700 F

## Engineering Fundamentals (30-37 credits)

Engg. Intro Course [3-4] SENGXXXX F/S

Intro to Comp [3-4] COMP1021 or COMP1022P or COMP2011 or COMP2012H F/S

General Phys. I [3] PHYS1112/1312 F/S

General Phys. II [3] PHYS1114/1314 F/S

General Chemistry I [3] CHEM1020 F/S

Calculus I [3-4] MATH1012/1013 /1023 F/S

Calculus II [3] MATH1014/1024 F/S

Acc. Calculus [4] MATH1020 F/S

Choose 3 out of 5  
Probability [3] ELEC2600/2600H F/S

Matrix Algebra [3] MATH2111 F/S

Multivariable Calculus [3] MATH2011 F/S

Differential Equations [3] MATH2351 F/S

## Energy Electives (18 credits) Choose at least 1 from each category

Investigation Project [3] ENEG4980

### Cat. 2 (Energy Storage & Distribution)

Energy Storage Technology [3] ENEG4320

Smart Energy Systems [3] ENEG4310 (ELEC3450)

### Cat. 4 (Sustainability)

Carbon Footprint Analysis and Reduction [3] CIVL4450

Economics for Env. Policy and Management [3] ENVR3410

### Cat. 1 (Energy Generation)

Energy Resources, Conversion and Technology [3] CENG4140

Photovoltaic and Renewable Energy [3] ELEC4530

Heat and Power Generation [3] ENEG4120

Solar Thermal Technology [3] MECH4902

Wind & Wave Power [3] ENEG4110

### Cat. 3 (Energy Utilization)

Solar Thermal Technology [3] MECH4902

Energy Resources, Conversion and Technology [3] CENG4140

Optimization of Energy Systems [3] ENEG4210

Air Conditioning Systems [3] MECH4340

Intelligent Building Systems [3] MECH4360

## Energy Policy (3 credits)

Energy Policy [3] ENEG3220/PPOL3210 S

## Energy Core (27 credits)

Materials for Energy Technologies [3] ENEG3110 F

Sustainable Energy Lab [3] ENEG3910 S

Environmental Assessment and Mgmt [3] CIVL2410 S

Electrical Technology [3] MECH3630 S

Energy Conversion [3] MECH3300 F

Basic Electronics [3] ELEC2420 F

Thermodynamics [3] MECH2310/CENG2210 F

Fluid Mechanics [3] MECH2210/CENG2220 S

Heat Transfer [3] MECH3310/CENG3220 F

