

# ENGR - ENGINEERING

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## ENGR201 Electrical Fundamentals I

Credits 5

Winter

**Registration Requirement:** RD090, WR090 and MTH252, each with a grade of "C" or better; or placement above stated course levels.

In this study of basic electrical circuit theory for engineers, students analyze voltage and current relationships. The course covers circuit parameters of resistance, inductance and capacitance. It includes basic DC and AC circuits and their natural responses.

**Additional Course Fee:** \$25.00

**This course fulfills:** Non-Lab Science

## ENGR211 Statics

Credits 4

Fall

**Registration Requirement:** RD090 and WR090, or IECC201R and IECC201W; and MTH252; each with a grade of "C" or better; or placement above stated course levels.

Statics students analyze the forces induced in structures and machines by various types of loading. Topics include 3-D equilibrium analysis, internal forces, centroids, moments of inertia and frictional equilibrium.

**This course fulfills:** Non-Lab Science

## ENGR212 Dynamics

Credits 4

Spring

**Registration Requirement:** ENGR211 and PH211.

Dynamics students apply kinematics, Newton's laws of motion, work-energy relationships and impulse-momentum relationships to engineering systems.

**This course fulfills:** Non-Lab Science

## ENGR213 Strength of Materials

Credits 4

Winter

**Registration Requirement:** ENGR211.

This course covers properties of structural materials and the analysis of stress and deformation in axially loaded members, circular shafts, beams and statically indeterminate systems.

**This course fulfills:** Non-Lab Science

## ENGR248 Engineering Graphics: Solidworks

Credits 3

Winter/Spring

**Registration Requirement:** RD090 and WR090, or IECC201R and IECC201W; and MTH020; each with a grade of "C" or better; or placement above stated course levels.

This course provides an introduction to engineering graphics using Solidworks. Topics include graphic communication, multiview and pictorial representation, graphical analysis and solution. Construction of parametric based 3-D models and assemblies is also covered.

**Additional Course Fee:** \$25.00

*Course fees are subject to change. Additional section fees (web, hybrid, etc.) may apply.*