ENGR 114. Advanced 3D Drafting. 3 Credits.
Creation of geometric solid representations of physical objects using three dimensional CAD. Introduces parametric design; analysis tools; assembly simulation; dimension methods & standards; tolerances & geometric tolerancing. Further addresses the design for manufacturing of machined parts; sheet metal; mold design. Prerequisite: ENGR 002 or Instructor permission.

ENGR 115. Infrastructure & Terrain Model. 1 Credit.
Three dimensional modeling of civil infrastructure using appropriate software to automate a wide range of land surveying and civil engineering tasks such as the land surveying input, parcels, surfaces, alignments, corridors, grading, pipe networks, and earthwork. Prerequisite: ENGR 002.

ENGR 116. Virtual Instrument Engineering. 1-3 Credits.
Introduces logical and electrical circuit modeling using computer-based virtualization tools in a graphical format. Includes circuit simulation; scripting, interfacing; signal processing; control of instruments and data acquisition. Prerequisite: ENGR 002 or Instructor permission. Cross-listed with: EE 116.

ENGR 190. Internship. 1-18 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

ENGR 192. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

ENGR 195. Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

ENGR 197. Teaching Assistantship. 1-3 Credits.
Undergraduate student service as a teaching assistant, usually in an introductory-level course in the discipline, for which credit is awarded. Offered at department discretion.

ENGR 198. Undergraduate Research. 1-18 Credits.
Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

ENGR 290. Internship. 1-18 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

ENGR 292. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.
ENGR 295. Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

ENGR 296. Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

ENGR 297. Teaching Assistantship. 1-3 Credits.
Undergraduate student service as a teaching assistant, usually in
an introductory-level course in the discipline, for which credit is
awarded. Offered at department discretion.

ENGR 298. Undergraduate Research. 1-18 Credits.
Undergraduate student work on individual or small team research
projects under the supervision of a faculty member, for which credit is
awarded. Offered at department discretion.