GENT 2323 Statics  
**Prerequisites:** MATH 2123 or 2144 and PHYS 1114 or PHYS 2014.  
**Description:** Forces acting on bodies at rest; forces, moments of force, distributed forces, reactions, free-body diagrams, friction, internal forces and moments of inertia. Applications.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Engineering Technology

GENT 2650 Technical Projects  
**Prerequisites:** Completion of three semesters’ work in a technical institute curriculum.  
**Description:** Special projects assigned by advisers with the approval of the director. A comprehensive written report must be prepared and an oral examination may also be required. Offered for variable credit, 1-4 credit hours, maximum of 4 credit hours.  
**Credit hours:** 1-4  
**Contact hours:** Contact: 1-4  
**Levels:** Undergraduate  
**Schedule types:** Independent Study  
**Department/School:** Engineering Technology

GENT 3323 Strength of Materials  
**Prerequisites:** MATH 2123 or MATH 2144 with grade of "C" or better in GENT 2323 or ENSC 2113.  
**Description:** Stress and strain and their relation to loads. Axial, torsional and bending loads, beam deflection, columns and combined stresses. Applications emphasized. Course previously offered as MCDT 3323 and MET 3323.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Engineering Technology

GENT 5113 Intelligent Mechatronics Systems and Robotics  
**Prerequisites:** GENT 3123 or equivalent.  
**Description:** Modelling of mechanical, electrical, and hydraulic components and robotic manipulators. Control systems design, electro-hydraulic drives, electrical drives, robotic manipulator and intelligent control design.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Engineering Technology