BASC MECHANICAL ENGINEERING, ENGINEERING MANAGEMENT AND ENTREPRENEURSHIP OPTION

If it moves, a mechanical engineer designed it! Mechanical engineers are responsible for a wide range of mechanical, thermal and biomedical systems and devices, from computer parts to power plants, from manufacturing systems to spacecraft. This is a broad-based area of engineering, and graduates find work in almost every industrial sector, including high tech, aerospace, manufacturing, auto, energy, biomedical and consulting.

This program is offered in English and in French.

French courses are available in first year and almost all of second year. Most third and fourth year courses are offered in English only.

Program Requirements

Co-operative education is available with this program.

Compulsory First-Year Courses:		
ADM 1100	Introduction to Business	3 Units
ADM 1340	Financial Accounting	3 Units
CHM 1311	Principles of Chemistry	3 Units
ENG 1112	Technical Report Writing	3 Units
GNG 1103	Introduction to Engineering Design	3 Units
GNG 1105	Engineering Mechanics	3 Units
GNG 1106	Fundamentals of Engineering Computation	3 Units
MAT 1320	Calculus I	3 Units
MAT 1322	Calculus II	3 Units
MAT 1341	Introduction to Linear Algebra	3 Units
MCG 1100	Introduction to Mechanical Engineering	3 Units
PHY 1122	Fundamentals of Physics II	3 Units
Compulsory Second-Year Courses:		
ADM 2320	Marketing	3 Units
CVG 2140	Mechanics of Materials I	3 Units
ELG 2336	Electric Circuits and Machines for Mechanical Engineering	3 Units
GNG 2101	Introduction to Product Development for Engineers and Computer Scientists	3 Units
MAT 2322	Calculus III for Engineers	3 Units
MAT 2377	Probability and Statistics for Engineers	3 Units
MAT 2384	Ordinary Differential Equations and Numerical Methods	3 Units
MCG 2101	Introduction to Design of Mechanical Systems	3 Units
MCG 2108	Dynamics	3 Units
MCG 2130	Thermodynamics I	3 Units
MCG 2131	Thermodynamics II	3 Units
MCG 2360	Engineering Materials I	3 Units
MCG 2361	Engineering Materials II	3 Units
Compulsory Third-Year Courses:		
ADM 3313	New Venture Creation	3 Units
ELG 3336	Electronics for Mechanical Engineers	3 Units
GNG 4170	Engineering Law	3 Units
MAT 3320	Mathematics for Engineers	3 Units
MCG 3110	Heat Transfer	3 Units
MCG 3130	Dynamics of Machinery	3 Units
MCG 3131	Machine Design	3 Units
MCG 3145	Advanced Strength of Materials	3 Units
MCG 3306	System Dynamics	3 Units
MCG 3307	Control Systems	3 Units
MCG 3340	Fluid Mechanics I	3 Units
MCG 3341	Fluid Mechanics II	3 Units
Compulsory Fourth-Year Courses:		
3 course units from:		3 Units
GNG 4120	Technology Entrepreneurship for Engineers and Computer Scientists	
GNG 4930	Internship in Mechanical Engineering or Biomedical Mechanical Engineering	
HIS 2129	Technology, Society and Environment Since 1850	
PHI 2394	Scientific Thought and Social Values	
MCG 4308	Mechanical Vibration Analysis	3 Units
MCG 4322	Mechanical Engineering Capstone Project	6 Units
MCG 4328	Manufacturing	3 Units
MCG 4340	Mechanical Engineering Laboratory	3 Units
3 course units of science electives		3 Units
Total:		**132 Units**