Universidad San Francisco de Quito Mechanical Engineering Department - Curriculum Flow Diagram 2017 - 2019 Biology for Applied Academic Calculus 1 + P Cosmos Self-knowledge English Level 1 Engineering + L Chemistry +P+L Writing MAT 1201 ARL 1002 ARL 1001 ESL 0001 BIO 1103 3C QUI 1001 3C ESP 1001 3C 3C Linear Algebra Introduction to The Self and the Calculus 2 + P Humanities **English Level 2 English Level 3** + P Economics Cosmos MAT 1202 LIT/FIL ESL 0002 ESL 0003 MAT 1401 3C ECN 1001 3C ARL 2001 3C 3C General Physics Differential Social Sciences Programming 1 Calculus 3 Machine Shop **English Level 4 English Level 5** Equations 1 + L + P2000 CMP 1101 MAT 2203 IME 2001 ESL 0004 ESL 0005 MAT 2002 3C FIS 2101 3C CCSS 2000 3C 3C 3C 3C Numerical **General Physics** Technical Fundamentals of Elective 1/2 Art English Level 6 ► Environmental Eng. Analysis 2 + L + PDrawing INA 1001 3C **ELECTIVA** ARTE ESL 0006 MAT 3001 3C FIS 2102 3C ING 2001 3C Material Science Basic Electronics Mechanical Writing and Thermodynamics and Engineering Statics **English Level 7** Sports Drawing Rethoric +11 + PICV 2001 + L ESL 0007 **DEP XXXX** IEE 2001 3C IME 3201 3C IME 3001 3C ENG 1001E 3C 3C IME 3101 3C Solid Mechanics Computational Thermodynamics Statistics for Gastronomic System Dynamics + P Mechanics +P+LDynamics + P 2 + LEngineering Culture **Mechanical Engineering Optatives** IME 3002 IME 3004 3C IME 3005 3C IME 3003 3C IME 3202 3C MAT 2005 3C GST 0010 3C 3C Area Code Subject Industrial Automatic Control +P Introduction to Robotics + L Automation and Instrumentation and Metrology +P+L Elective Control Design of Heat Transfer + Fluid Mechanics Materials Mechanisms/ Entrepreneurship Materials Engineering I Experiments + L +P+LProcessing + L Vibrations ADM 3002 IME 4003 3C IIN 3005 3C IME 4001 3C IME 4002 3C Wear, Corrosion and Failure IME OPT 3C Steel Structures Design Mechanisms Vibrations Pre professional Elective of Mechanical Finite Element Elective of Design and Materials ME Elective 1/4 ME Elective 2/4 Automotive Engineering nternship PASEM Design 1 Methods + P Design Management IME 4000 OC IME OPT IME OPT Plants and Processes IME 4301 3C IME 4004 3C IME OPT 3C IME OPT 3C IME OPT 3C Reliability and Maintenance QA/QC and Industrial Safety Capstone Design for Manufacturability Learning and Mechanical Desing Engineering Industrial Project ME Elective 3/4 ME Elective 4/4 Service PASEC Turbomachinery II (Capstone Economics ➤ Automation + L Preparation IME OPT IME OPT Design) PRC 2000 OC **Energy Systems Design** IIN 4003 3C IEE 4004 3C 3C 3C IME 5302 3C PREP TIT 3C Renewable Energies Enery Non-renewable Energies Aerodynamics means the subject has a Problems session. Project Social Sciences CFD (Computacional Fluid Dynamics) means the subject has Laboratory session. Colloquium ExamPreparation | Elective 2/2 means the number of credits of each subject Management 3000 & Exam or Research and Development General ING 0001 **ELECTIVA** IIN 5003 3C CCSS 3000 3C Capstone PREP TIT 3C Liberal Art General College

Notes

- 3 Credits are equivalent to 144 hours.
- The course with 0 credits are degree requirements.
- To fulfil the Elective Mechanisms/Vibrations, the student can choose: Elective of Vibrations or Elective of Mechanisms.
- To fulfil the Elective of Design Course, the student can choose: Design for Manufacturability (Requisite: IME 4002), or Energy Systems Design (Requisite: IME 3202, IME 4001, IME 4003).
- To fulfil the Elective of Management, the student can choose: Reliability and Maintenance or QA/QC and Industrial Safety