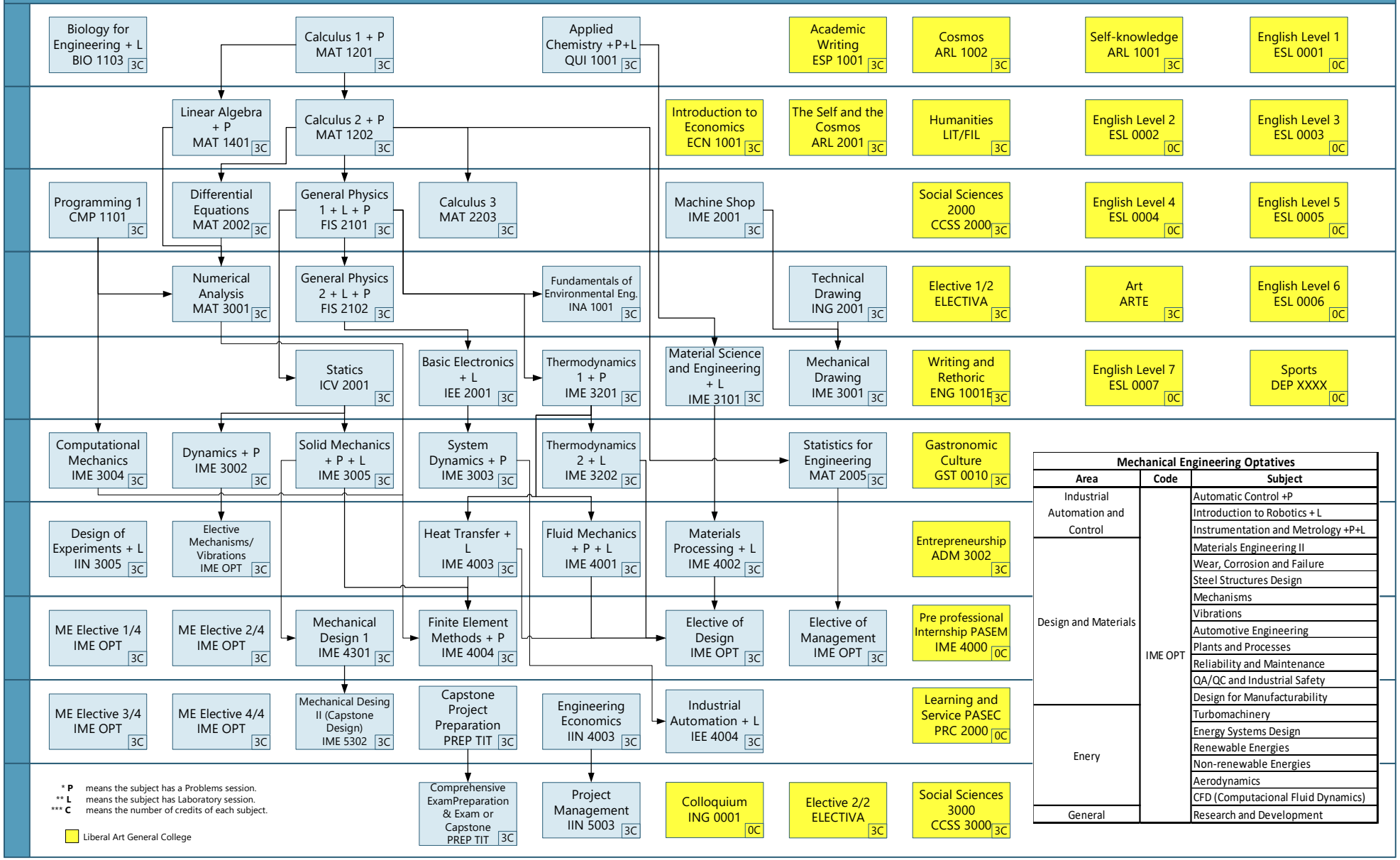
# Universidad San Francisco de Quito

Mechanical Engineering Department - Curriculum Flow Diagram 2017 - 2019




**Mechanical Engineering Optatives**

| Area | Code | Subject |
|---|---|---|
| Industrial Automation and Control | IME OPT | Automatic Control +P |
| | | Introduction to Robotics + L |
| | | Instrumentation and Metrology +P+L |
| Design and Materials | | Materials Engineering II |
| | | Wear, Corrosion and Failure |
| | | Steel Structures Design |
| | | Mechanisms |
| | | Vibrations |
| | | Automotive Engineering |
| | | Plants and Processes |
| | | Reliability and Maintenance |
| | | QA/QC and Industrial Safety |
| | | Design for Manufacturability |
| Enery | | Turbomachinery |
| | | Energy Systems Design |
| | | Renewable Energies |
| | | Non-renewable Energies |
| | | Aerodynamics |
| | | CFD (Computacional Fluid Dynamics) |
| General | | Research and Development |

**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.