BioMechatronics Certificate (C20100R)

Effective Term: Fall 2026
Total Credits Required: 17
Registrar's Office Approved: 04/13/2026

Semester 1

☐ BPM 110 – Bioprocess Practices (5 Credits)

☐ HYD 180* – Fluid Power in Automation (3 Credits)

☐ ISC 121 – Environmental Health & Safety (3 Credits)

Semester 2

☐ ATR 115 – cGMP Quality Systems (4 Credits)

☐ ISC 278 – Intro to Mechatronics (2 Credits)

Required Prerequisites:

*HYD-180 is essential preparation for ATR-115.

- HYD-180 provides foundational knowledge of hydraulic and pneumatic systems, including symbols, components, control circuits, actuators, and troubleshooting, that is directly applied in ATR-115. Mastery of these concepts ensures students are prepared to understand and succeed in the hydraulic, pneumatic, and electromechanical topics covered in Introduction to Mechatronics.

Certificate Description:

This certification provides instruction on maintenance procedures and equipment control. Emphasis is placed on cGMP, OSHA regulation, and manufacturing processes applicable to the biopharmaceutical industry.

This program planning guide is for advising purposes only and is subject to change.