



UNIVERSIDAD POLITÉCNICA DE PUERTO RICO
GRADUATE PROGRAM IN BIOMEDICAL ENGINEERING*
2026 - 2028

| COURSE | COURSE TITLE | PRE-REQUISITE | FA | WI | SP | FA | WI | SP |
|--|--|--|-----------|----|----|-----------|----|----|
| | | | 2026-2027 | | | 2027-2028 | | |
| CORE & MANDATORY COURSES | | | | | | | | |
| BME 6005 | Biosensors and Transducers | NONE | | X | | | X | |
| BME 6020 | Materials in Medicine and Biology | NONE | X | | X | X | | X |
| BME 6100** | Bioengineering and Physiological Systems | NONE | X | X | X | X | X | X |
| BME 6201 | Medical Device Design and Development | NONE | X | | X | X | | X |
| BME 6210 | Manufacture of Biotechnology Pharmaceutical Products | NONE | | X | | | X | |
| GMP 6510 | Research Methodology | 18 Credits Approved | X | X | X | X | X | X |
| EMPHASIS AREAS*** | | | | | | | | |
| BIOMEDICAL INDUSTRY MANUFACTURING | | | | | | | | |
| MMP 6006 | Lean Manufacturing | NONE | X | X | X | X | X | X |
| MMP 6234 | GMP'S and Regulatory Issues | NONE | X | | | X | | |
| MMP 6236 | Packaging Technology | NONE | | | X | | | X |
| HEALTHCARE SYSTEMS | | | | | | | | |
| HCM 6500 | Health Care Management I | NONE | X | | | X | | |
| HCM 6600 | Health Care Management II | NONE | | | X | | | X |
| HCM 6800 | Health Care Ethics | NONE | | X | | | X | |
| BIOMEDICAL INDUSTRY PROCESSES | | | | | | | | |
| MMP 6008 | Foundations in Quality Learning and Assurance | NONE | X | X | X | X | X | X |
| MMP 6050 | Materials Flow and Logistics | NONE | X | | | X | | |
| MMP 6518 | Project Management | MGM 5700 or SC | | X | | | X | |
| FREE ELECTIVE COURSES*** | | | | | | | | |
| GMP 6010 | Professional Writing and Presentations | NONE | X | X | X | X | X | X |
| MGM 5700 | Probabilities and Statistics Methods | NONE | X | X | X | X | X | X |
| MMP 6110 | Industry Profile and Business Management for Health Care | NONE | | X | | | X | |
| MMP 6132 | Manufacture of Pharmaceutical Solid Dosage Forms | NONE | X | | | X | | |
| MMP 6224 | Manufacture of Pharmaceutical Parenterals Dosage Forms | NONE | | X | | | X | |
| MMP 6230 | Manufacture of Pharmaceutical Semisolid Dosage Forms | NONE | | X | | | X | |
| MMP 6552 | Industrial Safety and OSHA Regulations | NONE | | X | | | X | |
| MMP 6560 | Organizational Behavior | NONE | X | | | X | | |
| MMP 6564 | Process Validation and Technology Transfer | NONE | | | X | | | X |
| MASTER PROJECT | | | | | | | | |
| BME 6700 | Design Project | All Core and Specialization Courses and MBMECA | X | X | X | X | X | X |
| BME 6701 | Design Project Extension | BME 6700 and MBMECA | X | X | X | X | X | X |

* THIS ACADEMIC OFFERING IS SUBJECT TO CHANGES.

** To be offered to BSBME Students as Technical Elective in a combined program.

*** Students must take 9 credits of a selected Emphasis Area courses, and 6 credits of elective courses that can be chosen from any emphasis area and/or Free Electives courses.

Legend:

X = Indicates Course will be offered this Term

SC = Similar Course

MBMECA = Master's in BME Coordinator Approval