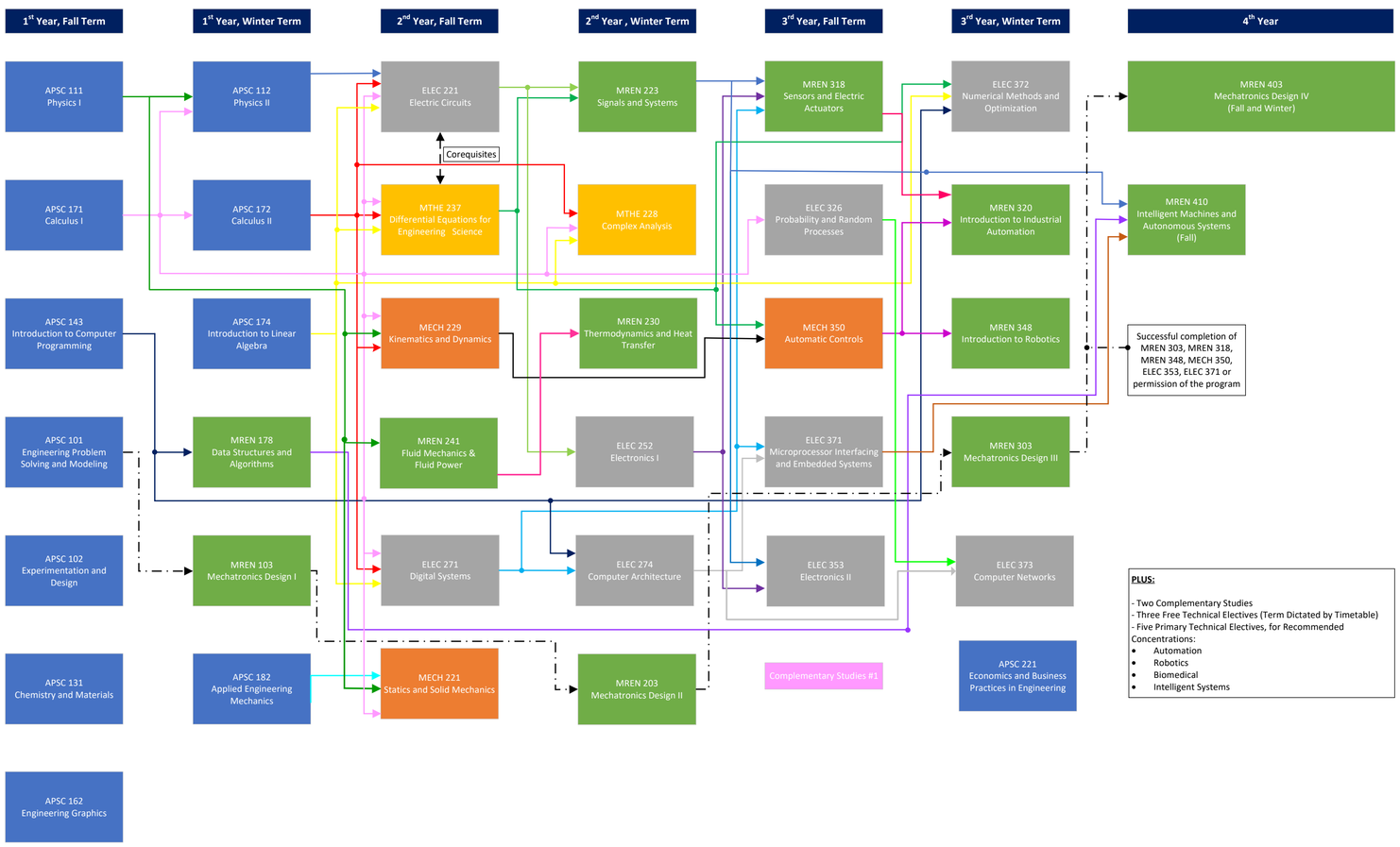
1st Year, Fall Term
1st Year, Winter Term
2nd Year, Fall Term
2nd Year , Winter Term
3rd Year, Fall Term
3rd Year, Winter Term
4th Year
APSC 111 Physics I
APSC 112 Physics II
ELEC 221 Electric Circuits
MREN 223 Signals and Systems
MREN 318 Sensors and Electric Actuators
ELEC 372 Numerical Methods and Optimization
MREN 403 Mechatronics Design IV (Fall and Winter)
Corequisites
APSC 171 Calculus I
APSC 172 Calculus II
MTHE 237 Differential Equations for Engineering Science
MTHE 228 Complex Analysis
ELEC 326 Probability and Random Processes
MREN 320 Introduction to Industrial Automation
MREN 410 Intelligent Machines and Autonomous Systems (Fall)
APSC 143 Introduction to Computer Programming
APSC 174 Introduction to Linear Algebra
MECH 229 Kinematics and Dynamics
MREN 230 Thermodynamics and Heat Transfer
MECH 350 Automatic Controls
MREN 348 Introduction to Robotics
Successful completion of MREN 303, MREN 318, MREN 348, MECH 350, ELEC 353, ELEC 371 or permission of the program
APSC 101 Engineering Problem Solving and Modeling
MREN 178 Data Structures and Algorithms
MREN 241 Fluid Mechanics & Fluid Power
ELEC 252 Electronics I
ELEC 371 Microprocessor Interfacing and Embedded Systems
MREN 303 Mechatronics Design III
APSC 102 Experimentation and Design
MREN 103 Mechatronics Design I
ELEC 271 Digital Systems
ELEC 274 Computer Architecture
ELEC 353 Electronics II
ELEC 373 Computer Networks
PLUS:
- Two Complementary Studies
- Three Free Technical Electives (Term Dictated by Timetable)
- Five Primary Technical Electives, for Recommended Concentrations:
• Automation
• Robotics
• Biomedical
• Intelligent Systems
APSC 131 Chemistry and Materials
APSC 182 Applied Engineering Mechanics
MECH 221 Statics and Solid Mechanics
MREN 203 Mechatronics Design II
Complementary Studies #1
APSC 221 Economics and Business Practices in Engineering
APSC 162 Engineering Graphics