TECHNICAL TRACKS

The undergraduate curriculum is also structured so that students can specialize in one or more important areas of technology within the curriculum, as technical electives. The sequence of courses will lead to a more in-depth understanding of a particular area of technology and possibly a minor. Early planning would increase the possibilities of completing a minor because of prerequisites.

Alternative Energy Technologies:
CHE 150: Green Engineering
CHE 278: Energy Alternatives Lab
CHE 258: Electrochemical engineering and fuel cells
CHE 430: Organic Electronics
ME 492: Fuel Cell Materials
ME 253: Introduction to Nuclear Engineering
(See minor in Environmental Engineering information at http://www.che.rochester.edu/graphics/EnEngMinor.pdf)

Applied Mathematics:
MTH 281: Introduction to Fourier Series-Orthogonal Polynomials and Boundary Value Problems
MTH 282: Introduction to Complex Variables
MTH 285: Introduction to Applied Mathematics
ME 211: Computational Methods
ME 401: Methods of Applied Mathematics
ME 406: Dynamical Systems
(See minor in Math information at http://www.math.rochester.edu/undergraduate/degrees/minor.html or Mechanical Engineering at http://www.me.rochester.edu/Undergraduate/undergrad_overview.html#minors)

Biomedical Engineering:
BME 101: Intro to Biomedical Engineering
BIO 110: Biology
BIO 111: Principles of Biology II
CHE 243: Fluid Dynamics
BME 260: Quantitative Physiology with lab
BME 262: Cell & Tissue Engineering
(See minor in Biomedical Engineering information at http://www.urmc.rochester.edu/bme/undergraduate/minor.cfm)

Biotechnology:
BIO 110: Principles of Biology
BIO 199: Molecular Cell Biology
BIO 250: Biochemistry
CHE 259: Transport Phenomena in Biological Systems
CHE 469: Biotechnology and Bioengineering
(See minor in Biology information at http://www.rochester.edu/college/BIO/UPBM/upbmminor.htm)

Business:
ACC 201: Principles of Accounting
MKT 203: Marketing
FIN 205: Financial Management
PHL 118: Business Ethics
MTH 208: Operations Research
(See minor in Business information at http://www.rochester.edu/college/ccas/businessminor.html)

Computer Science:
CSC 171: The Science of Programming
CSC 172: The Science of Data Structures
CSC 173: Computation and Formal Systems
CSC 242: Artificial Intelligence
CSC 252: Computer Organization
(See minor in Computer Science information at http://www.cs.rochester.edu/undergrad/#SECTION000450000000000000000)
**Economics:**
ECO 207: Intermediate Microeconomics  
ECO 209: Intermediate Macroeconomics  
ECO 237: Economics of Education  
ECO 238: Environmental Economics  
ECO 251: Industrial Organization  
ECO 294: Economic Development in a Global Perspective  
(See minor in Economics information at http://www.econ.rochester.edu/UG/minor.html)

**Environmental Engineering:**
CHE 150: Green Energy  
CHE 250: Separation Process  
CHE 258: Electrochemical Engineering & Fuel Cells  
CHE 264: Biofuels  
CHE 273: Chemical Engineering Process Design  
EES 218: Chemistry of Global Change  
EES 217: Physical and Chemical Hydrology  
EES 283: Sedimentary Basin Analysis  
(See minor in Environmental Engineering information at http://www.che.rochester.edu/graphics/EnEngMinor.pdf)

**Immunology Biology:**
BIO 111: Intro to Biology Part 1  
BIO 111: Intro to Biology Part 2  
BIO 111L: Introductory Biology Lab  
BIO 203: Mammalian Anatomy  
BIO 204: Mammalian Physiology  
BIO 210: Molecular Cell Biology  
BIO 250: Biochemistry  
MBI 473: Immunology  
(See minor in Biology information at http://www.rochester.edu/college/BIO/UPBM/upbmminor.htm)

**Materials Science:**
CHE 280: Chemistry of Advanced Materials  
ME 280: Introduction to Materials Science  
CHE 213: Engineering of Soft Matter  
CHE 286: Polymer Science & Technology  
CHM 252: Physical Chemistry II  
ECE 220: Introduction to Solid State  
(See minor in Materials Science information at http://www.seas.rochester.edu/options/msc.html)

**Physics:**
PHY217: Electricity & Magnetism I  
PHY218: Electricity & Magnetism II  
PHY227: Thermodynamics and Statistical Mechanics  
PHY237: Quantum Mechanics of Physical Systems  
PHY251: Introduction to Condensed Matter Physics  
(See minor in Physics information at http://www.pas.rochester.edu/urpas/page/minor)