## BME-CBE Technical Electives

### 1. Choose 3 BME Technical Elective Credits:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>NAME</th>
<th>TERM</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM 476</td>
<td>Biomaterials and Biomaterials</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BC 405</td>
<td>Independent Study (4 credits may be allowed of BIOM 476 &amp;/or 495)</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BC 504</td>
<td>Fundamentals of Biochemical Engineering</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>BIOM 525*</td>
<td>Cell and Tissue Engineering</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BIOM 533</td>
<td>Biomechanics Tools for Engineers</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BIOM 570</td>
<td>Bioengineering</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BIOM 571</td>
<td>Structure and Function of Biomaterials</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>BIOM 576</td>
<td>Quantitative Systems Physiology</td>
<td>S</td>
<td>4</td>
</tr>
<tr>
<td>BMS 301</td>
<td>Human Gross Anatomy</td>
<td>F,S,SS</td>
<td>5</td>
</tr>
<tr>
<td>BMS 322</td>
<td>Laboratory in Principles in Physiology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMS 325</td>
<td>Cellular Neurobiology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMS 345</td>
<td>Functional Neuromotoriology</td>
<td>S</td>
<td>4</td>
</tr>
<tr>
<td>BMS 403</td>
<td>Nerve and Muscle Tissue, Trauma and Disease</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMS 420</td>
<td>Cardiopulmonary Physiology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMS 430</td>
<td>Endocrinology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMS 450</td>
<td>Immunology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMS 500</td>
<td>Mammalian Physiology I</td>
<td>F</td>
<td>4</td>
</tr>
<tr>
<td>BMS 501</td>
<td>Mammalian Physiology II</td>
<td>S</td>
<td>4</td>
</tr>
<tr>
<td>BZ 311</td>
<td>Developmental Biology</td>
<td>S</td>
<td>5</td>
</tr>
<tr>
<td>BZ 350</td>
<td>Molecular and General Genetics</td>
<td>F,S,SS</td>
<td>5</td>
</tr>
<tr>
<td>BZ 476*</td>
<td>Topics in Advanced Genetics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CBE 350</td>
<td>Process Simulation</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CTR 543</td>
<td>Membranes for Biotechnology and Biomedicine</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 334</td>
<td>Quantitative Analysis Laboratory</td>
<td>F</td>
<td>5</td>
</tr>
</tbody>
</table>

### 2. Choose 6 CBE Technical Elective Credits:

*Other courses may be available; contact the CBE department for details.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>NAME</th>
<th>TERM</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA 301</td>
<td>Astrophysics I</td>
<td>F</td>
<td>5</td>
</tr>
<tr>
<td>AA 302</td>
<td>Astrophysics II</td>
<td>S</td>
<td>5</td>
</tr>
<tr>
<td>AA 313</td>
<td>Astrophysics III</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>ATS 555</td>
<td>Air Pollution</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>ATS 560</td>
<td>Air Pollution Measurement</td>
<td>F</td>
<td>2</td>
</tr>
<tr>
<td>BC 401</td>
<td>Comprehensive Biochemistry I</td>
<td>F</td>
<td>2</td>
</tr>
<tr>
<td>BC 403</td>
<td>Comprehensive Biochemistry II</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>BC 405</td>
<td>Comprehensive Biochemistry Lab</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BC 462</td>
<td>Molecular Genetics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BC 465</td>
<td>Molecular Regulation of Cell Function</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>BME 430</td>
<td>Biomedical Engineering</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BME 476 (Formerly BIOM 486)</td>
<td>Biomedical Design Practicum</td>
<td>F,S,SS</td>
<td>5</td>
</tr>
<tr>
<td>BME 525</td>
<td>Cell and Tissue Engineering</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMI/MECH 531</td>
<td>Materials Engineering</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMI/MECH 532</td>
<td>Material Issues in Mechanical Design</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMI/ECE 533</td>
<td>Biomechanics Tools for Engineers</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BOM 570</td>
<td>Bioengineering</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>BOM 571</td>
<td>Structure and Function of Biomaterials</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>BMS 302</td>
<td>Principles of Human Physiology</td>
<td>F,S,SS</td>
<td>5</td>
</tr>
<tr>
<td>BMS 301</td>
<td>Human Gross Anatomy</td>
<td>F,S,SS</td>
<td>5</td>
</tr>
<tr>
<td>BMS 302</td>
<td>Laboratory in Principles in Physiology</td>
<td>F,S</td>
<td>2</td>
</tr>
<tr>
<td>BMS 360</td>
<td>Fundamentals of Physiology</td>
<td>S</td>
<td>4</td>
</tr>
<tr>
<td>BMS 361</td>
<td>Topical Studies in Physiology</td>
<td>S</td>
<td>2</td>
</tr>
<tr>
<td>BMS 400</td>
<td>Cardiopulmonary Physiology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMS 430</td>
<td>Endocrinology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMS 450</td>
<td>Immunology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>BMS 500</td>
<td>Mammalian Physiology I</td>
<td>F</td>
<td>4</td>
</tr>
<tr>
<td>BMS 501</td>
<td>Mammalian Physiology II</td>
<td>S</td>
<td>4</td>
</tr>
<tr>
<td>BZ 311</td>
<td>Developmental Biology</td>
<td>S</td>
<td>5</td>
</tr>
<tr>
<td>BZ 350</td>
<td>Molecular and General Genetics</td>
<td>F,S,SS</td>
<td>5</td>
</tr>
<tr>
<td>BZ 476*</td>
<td>Topics in Advanced Genetics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CBE 350</td>
<td>Process Simulation</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CTR 543</td>
<td>Membranes for Biotechnology and Biomedicine</td>
<td>F</td>
<td>3</td>
</tr>
</tbody>
</table>

## BME-CBE Technical Electives (Continued)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>NAME</th>
<th>TERM</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 335</td>
<td>Intro to Analytical Chemistry</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 336</td>
<td>Modern Organic Chemistry II</td>
<td>F,S,SS</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 337</td>
<td>Organic Chemistry</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 338</td>
<td>Principles of NMR and MRI</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 341</td>
<td>Advanced Cell Biology</td>
<td>F</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 342</td>
<td>Techniques in Molecular &amp; Cellular Biology</td>
<td>F</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 350</td>
<td>Micro-Electro-Mechanical Devices</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 351</td>
<td>Introduction to Radiation Biology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 352</td>
<td>Fundamentals of Toxicology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 353</td>
<td>Cancer Biology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 357</td>
<td>Biomechanical Principles of Human Movement</td>
<td>F,S</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 359</td>
<td>Neuromuscular Aspects of Human Movement</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 405</td>
<td>Physiology of Exercise</td>
<td>F,S,SS</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 406</td>
<td>Exercise Testing Instrumentation</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 414</td>
<td>Physical Activity Throughout the Lifespan</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 418</td>
<td>Exercise and Chronic Disease</td>
<td>F,S,SS</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 419</td>
<td>Mathematics in Biology and Medicine</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 543**</td>
<td>Biostatistical Mechanics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 544</td>
<td>General Microbiology</td>
<td>F,S,SS</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 545</td>
<td>General Microbiology Laboratory</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 546</td>
<td>Immunology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 547</td>
<td>Immunology Laboratory</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 548</td>
<td>Medical Biochemistry</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 549</td>
<td>Medical Biochemistry Lab</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 550</td>
<td>Medical and Molecular Virology</td>
<td>F</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 551</td>
<td>Industrial Microbiology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 552</td>
<td>Microbial Physiology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 553</td>
<td>Microbial Genetics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 556</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 557</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 558</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 559</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 560</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 561</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 562</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 563</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 564</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 565</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 566</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 567</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 568</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 569</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 570</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 571</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 572</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 573</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 574</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 575</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 576</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 577</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 578</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 579</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 580</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 581</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 582</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 583</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 584</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 585</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 586</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 587</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 588</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 589</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 590</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 591</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 592</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 593</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 594</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 595</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 596</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 597</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 598</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 599</td>
<td>Bioinformatics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>COURSE</td>
<td>NAME</td>
<td>TERM</td>
<td>CR</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>------</td>
<td>----</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Hydraulic Engineering</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 413</td>
<td>Environmental River Mechanics</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 425</td>
<td>Soils and Water Engineering</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 438</td>
<td>Environmental Engineering Concepts/ Pollution Control Engineering</td>
<td>F,S</td>
<td>4</td>
</tr>
<tr>
<td>MATH 440</td>
<td>Nonpoint Source Pollution</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>MATH 504</td>
<td>Abrupt Engineering</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>MATH 520</td>
<td>Physical Hydrology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>MATH 551</td>
<td>Environmental Hydrology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>MATH 588</td>
<td>Advanced Aquatic Chemistry</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 540</td>
<td>Advanced Biological Wastewater Processing</td>
<td>S</td>
<td>2</td>
</tr>
<tr>
<td>MATH 560</td>
<td>Advanced Mechanics of Materials</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>CM 105</td>
<td>Advanced Cell Biology</td>
<td>F</td>
<td>4</td>
</tr>
<tr>
<td>CM 102</td>
<td>Techniques in Molecular &amp; Cellular Biology</td>
<td>F</td>
<td>2</td>
</tr>
<tr>
<td>CS 160</td>
<td>Foundations in Programming</td>
<td>F,S</td>
<td>4</td>
</tr>
<tr>
<td>CS 161</td>
<td>Object-Oriented Problem Solving</td>
<td>F,S,S</td>
<td>4</td>
</tr>
<tr>
<td>CS 202</td>
<td>Algorithms and Data Structures</td>
<td>F,S,S</td>
<td>4</td>
</tr>
<tr>
<td>CS 270</td>
<td>Computer Organization</td>
<td>F</td>
<td>4</td>
</tr>
<tr>
<td>CS 430</td>
<td>Introduction to Analysis of Algorithms</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>ECE 204</td>
<td>Introduction to Electrical Engineering</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 208</td>
<td>Undergraduate Research</td>
<td>Var</td>
<td>Var</td>
</tr>
<tr>
<td>ENGR 498</td>
<td>Undergraduate Research</td>
<td>Var</td>
<td>Var</td>
</tr>
<tr>
<td>ENGR 510</td>
<td>Linear Programming and Network Flows</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>ENVE 322</td>
<td>Basic Hydrology</td>
<td>F,S</td>
<td>3</td>
</tr>
<tr>
<td>ENVE 418</td>
<td>Pollution Control Engineering</td>
<td>F,S</td>
<td>4</td>
</tr>
<tr>
<td>ENVE 441</td>
<td>Water and Wastewater Characterization</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>ERHS 200</td>
<td>Introduction to Radiation Biology</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>ERHS 446</td>
<td>Environmental Toxicology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>ERHS 448</td>
<td>Environmental Contaminants: Exposure and Fate</td>
<td>F,S,S</td>
<td>4</td>
</tr>
<tr>
<td>ERHS 502</td>
<td>Fundamentals of Toxicology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>ERHS 510</td>
<td>Cancer Biology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>ERHS 547</td>
<td>Equipment and Instrumentation</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>F 311</td>
<td>Forest Ecology</td>
<td>F,S</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 447</td>
<td>Food Chemistry</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 572</td>
<td>Food Biotechnology</td>
<td>S</td>
<td>2</td>
</tr>
<tr>
<td>QGOL 150</td>
<td>Physical Geology for Scientists and Engineers</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>QGOL 454</td>
<td>Geomorphology</td>
<td>S</td>
<td>4</td>
</tr>
<tr>
<td>HES 307</td>
<td>Biomechanical Principles of Human Movement</td>
<td>F,S,S</td>
<td>3</td>
</tr>
<tr>
<td>HES 319</td>
<td>Neurovascular Aspects of Human Movement</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>HES 403</td>
<td>Physiology of Exercise</td>
<td>F,S,S</td>
<td>4</td>
</tr>
<tr>
<td>HONR 499</td>
<td>Senior Honors Thesis</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>LIF 205</td>
<td>Introductory Genetics</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>LIF 208</td>
<td>Introduction to Evolutionary Biology</td>
<td>F</td>
<td>2</td>
</tr>
<tr>
<td>LIF 301</td>
<td>Ecology</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>MATH 317</td>
<td>Advanced Calculus of One Variable</td>
<td>F,S,S</td>
<td>4</td>
</tr>
<tr>
<td>MATH 332</td>
<td>Partial Differential Equations</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 348</td>
<td>Theory of Population and Evolutionary Ecology</td>
<td>F</td>
<td>4</td>
</tr>
<tr>
<td>MATH 366</td>
<td>Introduction to Abstract Algebra</td>
<td>F,S,S</td>
<td>4</td>
</tr>
<tr>
<td>MATH 369</td>
<td>Linear Algebra</td>
<td>F,S,S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 405</td>
<td>Introduction to Number Theory</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 417</td>
<td>Advanced Calculus I</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 418</td>
<td>Advanced Calculus II</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 419</td>
<td>Introduction to Complex Variables</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>MATH 455</td>
<td>Mathematics in Biology and Medicine</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>MATH 469</td>
<td>Linear Algebra II</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 501</td>
<td>Combinatorics I</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>MATH 502</td>
<td>Combinatorics II</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 510</td>
<td>Linear Programming and Network Flows</td>
<td>F,S,S</td>
<td>3</td>
</tr>
<tr>
<td>MATH 545</td>
<td>Partial Differential Equations I</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>MATH 546</td>
<td>Partial Differential Equations II</td>
<td>S</td>
<td>3</td>
</tr>
</tbody>
</table>

Key:
- F = Fall
- S = Spring
- SS = Summer

**Available Every Other Year (Even)**

**Available Every Other Year (Odd)**

Note: Course availability changes frequently. Please check with individual departments regarding course availability.