Green Process Engineering
September 2020 (students who entered first year in September 2016 or earlier)

**Year 2:**

**Term A**
- AM 2270a Applied Math for Engineering II
- GPE 2213a Green Chemistry I
- CBE 2214a Engineering Thermodynamics
- CBE 2220a Chemical Process Calculations
- CBE 2290a Fundamental of Biochemical and Environmental Engineering
- ES 2211F Engineering Communications

**Term B**
- AM 2277b Applied Math Chemical and Civil Engineering III
- GPE 2214b Green Chemistry II
- CBE 2221b Fluid Flow
- CBE 2224b Chemical Engineering Thermodynamics
- CBE 2291b Computational Methods for Engineers
- ECE 2238b Introduction to Electrical Engineering

**Year 3:**

**Term A**
- GPE 3315a Reaction Engineering with Green Engineering Applications
- GPE 3384a Sustainable Energy, Solar and Fuel Cells
- GPE 3382a Fundamentals of Green Process Engineering and Safety
- GPE 3395y Green Process Engineering Laboratory Course
- CBE 3318a Introduction to Chemical Process Simulation
- CBE 3322a Heat Transfer Operations

**Term B**
- GPE 3386b Sustainable Engineering Life Cycle Analysis and Case Studies
- GPE 3395y Green Process Engineering Laboratory Course
- CBE 3310b Process Dynamics & Control
- CBE 3323b Staged Operations
- CBE 3324b Mass Transfer Operations
- SS 2143b Applied Statistics and Data Analysis
- 0.5 Technical Elective

**Year 4:**

**Term A**
- Bus 2299E Business for Engineers
- GPE 4497 Green Process Design
- GPE 4484a Green Fuels and Chemicals
- 0.5 Non-technical elective taken from the approved list (either term)
  One of: CBE 4407a/b, CBE 4409a/b, CEE 4405a/b
- 0.5 Technical Elective

**Term B**
- Bus 2299E Business for Engineers
- GPE 4497 Green Process Design
- ES 4498G Engineering Ethics, Sustainable Development and the Law
- 0.5 Technical Elective

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**NOTES:**

**Important:**
Students are responsible for ensuring they have the correct courses required for their degree. If you are unsure which courses you still need or if you see courses listed on the progression sheet that are no longer offered or are not offered in the term you see listed here, please contact your Academic Counsellor.

**Non-technical Electives:**
For a list of approved non-technical electives, please visit: http://www.eng.uwo.ca/undergraduate/upper_year/electives.html

**Technical Electives List:**

Some technical electives may not be offered in a given academic year. Consult the Department or academic calendar for accurate listing.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CBE 3325a/b</td>
<td>Particulate Operations</td>
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<tr>
<td>CBE 3330a/b</td>
<td>Bioreaction and Bioprocess Engineering</td>
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<tr>
<td>CBE 4404a/b</td>
<td>Downstream Processing in Pharmaceutical Manufacturing</td>
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<tr>
<td>CBE 4407a/b</td>
<td>Solid Waste Treatment</td>
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<tr>
<td>CBE 4409a/b</td>
<td>Wastewater Treatment</td>
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<tr>
<td>GPE 4415</td>
<td>Green Process Engineering Project</td>
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<tr>
<td>CBE 4417a/b</td>
<td>Catalytic Processes</td>
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<tr>
<td>CBE 4418a/b</td>
<td>Industrial Multiphase Reactor Design</td>
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<tr>
<td>CBE 4420a/b</td>
<td>Computer Process Control</td>
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<tr>
<td>CBE 4421a/b</td>
<td>Introduction to Biomaterials Engineering</td>
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<td>CBE 4422a/b</td>
<td>Nanobiotechnology</td>
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<tr>
<td>CBE 4423a/b</td>
<td>Tissue Engineering</td>
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<tr>
<td>CBE 4424a/b</td>
<td>Biosensor Principles and Applications</td>
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<tr>
<td>CBE 4432a/b</td>
<td>Energy and Fuels Production Systems</td>
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<tr>
<td>CBE 4463a/b</td>
<td>Water Pollution Design</td>
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<td>CBE 4485a/b</td>
<td>Energy and Society</td>
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<tr>
<td>CBE 4493a/b</td>
<td>Polymer Engineering</td>
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<td>CEE 3362a/b</td>
<td>Drinking Water Quality and Treatment</td>
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<tr>
<td>CEE 4405a/b</td>
<td>Air Pollution</td>
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<tr>
<td>MME 4429a/b</td>
<td>Nuclear Engineering</td>
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</tbody>
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The official version of the academic calendar can be found at: [www.westerncalendar.uwo.ca](http://www.westerncalendar.uwo.ca)