

# PLASTICS ENGINEERING TECHNOLOGY (PLTBD)

## Recommended Action Plan (RAP)

### Bachelor of Science Degree

134 credits

Fall Semester Freshman Year – 16.5 credits		Credits	Spring Semester Freshman Year – 17 credits		Credits
<i>ENGL 015</i>	<i>Rhetoric and Composition (GWS)</i>	3	<i>CHEM 110</i>	<i>Chemical Principles I (GN)</i>	3
<b>*MATH 081</b>	<b>Technical Mathematics I (GQ)</b>	3	<i>CHEM 111</i>	<i>Experimental Chemistry I (GN)</i>	1
EG T 120	Intro Graphics & Solids Modeling	3	<b>*MATH 082</b>	<b>Technical Mathematics II (GQ)</b>	3
<b>PL ET 050</b>	<b>Computer Applications for PL ET</b>	2	EG T 121	Applied Solid Modeling	3
<i>PSU 007</i>	<i>First-Year Seminar (FYS)</i>	1	<i>PHYS 250</i>	<i>Introductory Physics I (GN)</i>	4
<i>BB H/KINES, From University List (GHA)</i>		1.5	<i>GA,GH, or GS, From General Education List</i>		3
<i>GA,GH, or GS, From General Education List</i>		3			
Fall Semester Sophomore Year – 16 credits		Credits	Spring Semester Sophomore Year – 18 credits		Credits
<b>*MATH 083</b>	<b>Technical Calculus (GQ)</b>	4	<b>*MATH 210</b>	<b>Calc &amp; Analy Geom w/Appl</b>	3
MCH T 111	Mechanics Technology: Statics	3	<b>PL ET 206W</b>	<b>Plastic Materials &amp; Properties</b>	3
<b>PL ET 205</b>	<b>Intro to Plastics</b>	3	<i>CAS 100</i>	<i>Effective Speech (GWS)</i>	3
<b>PL ET 222</b>	<b>Intro to Plastics Processing</b>	4	<b>PL ET 227</b>	<b>Plastics Processing/Statistical Process</b>	4
<b>PL ET 225</b>	<b>Instr. Cont. &amp; Automation</b>	2	<b>PL ET 232</b>	<b>Intro to Part &amp; Tool Design</b>	3
			<b>PL ET 235</b>	<b>Tool Design &amp; Machining</b>	2
Fall Semester Junior Year – 16 credits		Credits	Spring Semester Junior Year – 17.5 credits		Credits
<b>MCH T 213</b>	<b>Strength &amp; Properties Materials</b>	3	<i>ENGL 202C</i>	<i>Effective Writing: Tech Writing (GWS)</i>	3
MATH 211	Inter. Calc. & Diff. Eqs. W Appl.	3	<b>MET 418</b>	<b>Finite Element Analysis Plastics</b>	3
<b>PL ET 304</b>	<b>Plastic Material Props &amp; Appl</b>	3	<b>PL ET 323</b>	<b>Packaging Processes</b>	3
<b>PL ET 330</b>	<b>Adv Tooling &amp; Rheology</b>	4	<b>PL ET 345</b>	<b>Heat Transfer</b>	2
<b>PL ET 366</b>	<b>Fluid &amp; Thermal Sciences</b>	3	<b>PL ET 350</b>	<b>Design of Plastic Parts</b>	4
			<b>PL ET 494</b>	<b>Plastics Projects I</b>	1
			<i>BB H/KINES, From University List (GHA)</i>		1.5
Fall Semester Senior Year – 17 credits		Credits	Spring Semester Senior Year – 16 credits		Credits
<b>MANGT 409</b>	<b>Project Management for Engrs</b>	3	<b>PL ET 400</b>	<b>Plastics Management Issues</b>	3
<b>PL ET 430</b>	<b>Packaging Design</b>	2	<b>PL ET 494</b>	<b>Plastics Projects III</b>	1
<b>PL ET 494</b>	<b>Plastics Projects II</b>	1	<i>GA,GH, or GS, From General Education List</i>		3
<i>GA,GH, or GS, From General Education List</i>		3	<i>GA,GH, or GS, From General Education List</i>		3
<i>Science Elect., From General Education List (GN)</i>		2	<i>GA,GH, or GS, From General Education List</i>		3
<b>MGMT Elective, Program List (300, 400-level)</b>		3	<b>Tech Elective, Program List (300, 400-level)</b>		3
<b>Tech Elective, Program List (300, 400-level)</b>		3			

#### Notes:

- **Bold type** indicates courses requiring a quality grade of C or better.
- *Italic* indicates courses that satisfy both major and General Education requirements.
- ***Bold italics*** indicates courses requiring a quality grade of C or better and that satisfy both major and General Education requirements.
- GWS, GHA, GQ, GN, GA, GH, and GS are codes used to identify General Education requirements.
- W is the code used to designate courses that satisfy University Writing Across the Curriculum requirements.
- If you have not completed two years of high school study of one foreign language and graduated in the year 2001 or later, you must also schedule 3-4 credits of college level foreign language (in addition to your program requirements).
- A PLTBD student must complete general education requirements, the requirements for the major, the number of elective credits required, and earn at least a minimum 2.00 grade-point average.
- General education requirements include 6 credits of arts (GA), 6 credits of humanities (GH), 6 credits of social and behavioral sciences (GS), 3 credits of health and physical activity (GHA), 9 credits of natural sciences (GN), 9 credits of writing/speaking (GWS), and 6 credits of quantification (GQ).
- Also required are 3 credits of United States cultures (US), 3 credits of International Cultures (IL) which can be used to satisfy part of the general education requirements. A (USI) may count for either category, but not both.
- The School of Engineering Advising Handbook is on-line at: <http://www.behrend.psu.edu/academic/engineering/SchoolHandbook.pdf>.
- University Undergraduate Advising Handbook is on-line at <http://www.psu.edu/dus/handbook/>.
- Requirement Web page <http://www.psu.edu/advising/requirements.htm>.
- Blue Book Web site <http://www.psu.edu/bulletins/bluebook/>.
- \*Students may take **MATH 140** and **MATH 141** in lieu of **MATH 081**, **082**, **083**, and **210**, if qualified, and should contact Mr. Beaumont prior to 1<sup>st</sup> week of class. If you take this math option, you will be required to take an additional 6 credits of electives.

## School Approved Electives for Plastics Engineering Technology

### Technical Electives

PL ET	460	(3:2:3)	Advanced CAE for Plastics
PL ET	462	(3:2:3)	Advanced Injection Molding
PL ET	464	(3:2:3)	Plastics Failure Analysis
PL ET	465	(3:2:3)	Advanced CAE for Plastics II
PL ET	467	(3:1:4)	Secondary Operations
PL ET	468	(3:1:4)	Rapid Commercialization
PL ET	*495	(3 cr.)	Advanced Co-Op
PL ET	*496 <sup>1</sup>	(1-3 cr.)	Independent Study
PL ET	*497 <sup>1</sup>	(1-3 cr.)	Special Topic

\*These courses must be approved by the PLTBD Program Chair prior to registration in order to be used as a technical elective.

<sup>1</sup>Requires prior approval from the Plastics Engineering Technology Program Chair.

### Non-Technical/Management Electives

Students should see a Plastics faculty advisor regarding their non-technical/management elective requirements and course options.