

Product Development and Commercialization – Bachelor of Science

[RE-BS-ENGT-PDAC] Regional College Catalog Year: 2013-2014

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses and milestones designated as critical (in boldface and shaded areas) must be completed in the semester listed to ensure a timely graduation.

boldface and shaded areas) must be completed in the semester	· listed	to ensu	ure a tir		aduation.
Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
Semester One: [17 Credit Hours]					
CS 10061 Introduction to Computer Programming					
or DSCI 15310 Computational Thinking and Programming or EERT 22003 Technical Computing	3				
MATH 11010 Algebra for Calculus	3				Fulfills Kent Core Mathematics and Critical Reasoning
US 10097 Destination Kent State: First Year Experience	1				Not required of transfer students with 25 credits
Recommended Individualized Specialization Electives	7				See note on page 2
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Two: [17 Credit Hours]					
ENG 20002 Introduction to Technical Writing or ITAP 26638 Business Communications	3				
MATH 11012 Intuitive Calculus	3				Fulfills Kent Core Additional
MATH 11022 Trigonometry	3				Fulfills Kent Core Additional
Recommended Individualized Specialization Electives	5				See note on page 2
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Three: [13-15 Credit Hours]					
PHY 12201 Technical Physics I (3)					
or PHY 13001 General College Physics I (4) and PHY 13021 General College Physics Laboratory I (1)	3-5				Fulfills Kent Core Basic Sciences
Recommended Individualized Specialization Electives	10				See note on page 2
Semester Four: [18-19 Credit Hours]					
PHY 12202 Technical Physics I (4) or PHY 13012 College Physics II (2) and	3-4				Fulfills Kent Core Basic Sciences
PHY 13022 General College Physics Laboratory II (1)	3-4				
Recommended Individualized Specialization Electives	12				See note on page 2
Kent Core Requirement	3				
Semester Five: [13 Credit Hours]					
TECH 31020 Automated Manufacturing	3				
ECON 22060 Principles of Microeconomics	3				Fulfills Kent Core Social Sciences
EERT 21010 Engineering and Professional Ethics	3				Choose course based on the number of upper-division
or TECH 31010 Engineering and Professional Ethics ITAP 26636 Project Management for Administrative					hours still needed
Professionals	1				
General Elective (upper division)	3				
Semester Six: [14-15 Credit Hours]					
CDAG 43002 Graphics Design Technology	3				
TECH 36620 Project Management in Engineering and Technology	3				
TECH 43050 Inventive Problem Solving	3				
Kent Core Requirement	3				
General Elective (upper division)	2-3				
Semester Seven: [12 Credit Hours]					
MATH 30011 Basic Probability and Statistics	3				
TECH 31032 Power Technology	3				
TECH 43060 Management of Technology Innovation	3				
Kent Core Requirement	3				See Kent Core Summary below
		•	•	•	•



- Roadmap: Engineering Technology - Product Development and Commercialization – Bachelor of Science

[RE-BS-ENGT-PDAC] Regional College

Catalog Year: 2013-2014

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
Semester Eight: [15 Credit Hours]					
MERT 43092 Engineering Technology Practicum	1				Fulfills experiential learning requirement
TAS 47900 Applied Studies Capstone Seminar	3		С		Fulfills experiential learning requirement
TECH 31000 Cultural Dynamics of Technology (3) or TECH 33092 Cooperative Education-Professional Development	2-3		С		Fulfills writing-intensive course requirement; TECH 31000 fulfills domestic diversity requirement; TECH33092 fulfills experiential learning requirement; choose course based on the number of upper-division hours still needed
Any 30000 or 40000 level course from CDAG, EERT, GAE, MERT or TECH	3				
Kent Core Requirement	3				See Kent Core Summary on page 2
General Elective (upper division)	3				Total hours depends on meeting minimum 121 credit hours and minimum 39 upper-division hours

Graduation Requirements Summary

	-	-					
Minimum	Minimum Upper-	Minimum	Global / Domestic	Writing-	Experiential	Minimum	
Total Hours	Division Hours	Kent Core Hours	Diversity Course	Intensive	Learning	Major GPA	Overall GPA
121	39	36	Kent Core/ TECH 31000 or Kent Core or Elective	TECH 31000 or TECH 33092	TAS 47900 or TECH 33092 or visit www.kent.edu/catalog/elr	2.000	2.000

Kent Core Summary

Kent Core Categories	Important Notes	Remaining Credit Hours
Composition (6-8 credit hours) ENG 11002, 11011, 21011; HONR 10197, 10297	Enrollment based on placement test	6-8
Mathematics and Critical Reasoning (3-5 credit hours)	Fulfilled in this major with MATH 11010	0
Humanities and Fine Arts (9 credit hours) Minimum one course from humanities in Arts and Sciences and minimum one course from fine arts	May fulfill diversity requirement	9
Social Sciences (6 credit hours) Must be selected from two curricular areas	3 credits are fulfilled in this major with ECON 22060	3
Basic Sciences (6-7 credit hours) Must include one laboratory	Fulfilled in this major with PHY 12201 and 12202 or PHY 13001, 13021 and 13022	0
Additional (6 credit hours)	Fulfilled in this major with and MATH 11012 and MATH 11022	0

Note 1: Recommended Individualized Specialization Electives (34 credit hours):

ACTT 11000 Accounting I-Financial	4	CADT 22003 Solid Modeling	2
BMRT 11000 Introduction to Business	3	CHEM 10050 Fundamentals of Chemistry ^K	3
BMRT 11009 Introduction to Management Technology	3	CHEM 10052 Introduction to Organic Chemistry ^K	2
BMRT 21011 Fundamentals of Financial Management	3	CHEM 10053 Inorganic and Organic Laboratory ^K	1
BMRT 21050 Marketing Technology	3	IERT 12005 Applications in CAD	2
BSCI 10110 Biological Diversity ^K	4	TECH 34002 Advanced CAD II	3
BSCI 10120 Biological Foundations ^K	4	Others by program director approval	

K-fulfills Kent Core Requirement

Note: Students in the Bachelor of Science in Engineering Technology degree program may apply for more than one concentration, provided that there are 18 credit hours or more of Upper Division course work in the subsequent concentration. These hours must be in one of the Engineering Technology disciplines of EERT, MERT, CDAG, GAE or TECH. Students must also complete all of the other concentration requirements specific to each concentration, in addition to differentiating their major elective courses across the two concentrations. Students who declare the 2+2 Integrated Engineering Technology concentration may not elect any other concentration. Likewise, students who elect any of the other Bachelor of Science in Engineering Technology concentrations may not elect the 2+2 Integrated Engineering Technology concentration.

Students electing a dual concentration must meet with an advisor to plan an individualized plan of study that meets these requirements before the dual concentration option will be approved for that student. Any changes made to the program of study also must be approved by an advisor, or the student may not be allowed to graduate with this option.



Product Development and Commercialization – Bachelor of Science

elopment and Commercialization – Bachelor of Science [RE-BS-ENGT-PDAC]

Regional College Catalog Year: 2013-2014

Kent Core

Students must complete a minimum 36 credit hours of the Kent Core. Certain courses required in programs and in student's major field may also fulfill the Kent Core. Honors equivalents shall satisfy the Kent Core. None of the courses on the Kent Core list may be taken with a pass/fail grade. Visit www.kent.edu/catalog/kent-core for course list.

Diversity Course Requirement

Students must complete a two-course diversity requirement, consisting of one with a domestic (U.S.) focus and one with a global focus. One course must come from the Kent Core. The second course may be taken as a second Kent Core, within a major or minor, or as a general elective; or, with dean's approval, by completing one semester of study in another country. Visit www.kent.edu/catalog/diversity for course list.

Writing-Intensive Course Requirement

Students must complete a one-course writing-intensive requirement in their major and earn minimum C (2.000) grade. Visit <u>www.kent.edu/catalog/wic</u> for course list.

Experiential Learning Requirement (ELR)

To provide students with direct engagement in learning experiences that promote academic relevance, meaning and an understanding of real-world issues, students must complete this requirement at Kent State, either as a for-credit course or as a non-credit, non-course experience approved by the appropriate faculty member. Visit <u>www.kent.edu/catalog/elr</u> for course list.

Upper-Division Requirement

Students must complete a minimum 39 upper-division (numbered 30000 to 49999) credit hours of coursework.

