ACADEMIC MAP
Software Engineering, B.A.T.

Parkersburg
West Virginia University

Semester 1

COURSE	CR	COMMENTS
COLL 101 ORIENTATION TO COLLEGE	1	
CS 101 INTRO TO PC APPLICATIONS	4	
CS 121 INTRODUCTION TO PROGRAMMING	4	⚑
MATH 125 — TECHNICAL MATH OR HIGHER	3	⚑
ENGL 101 OR ENGL 103	3	
TOTAL:	**15**	

Semester 2

COURSE	CR	COMMENTS
CS 122 OBJECT ORIENTED PROGRAMMING	4	
CIT 130 PRINCIPLES OF INFORMATION SYSTEMS	3	
CS 129 INTRO TO WEB PAGE DESIGN	3	
CS 201 DATABASE THEORY AND DESIGN	3	
FREE ELECTIVE	2	
CS 403 SOFTWARE ENGR & DATA STRUCTURE	3	
TOTAL:	**18**	

Semester 3

COURSE	CR	COMMENTS
CS 221 DATA STRUCTURES	4	⚑
CIT 114 WINDOWS OPERATING SYSTEMS	3	MICROSOFT CERT.
CS 220 WEB APPLICATION DEVELOPMENT	3	
CIT 105 INTRODUCTION TO NETWORKS	5	CISCO 1
TOTAL:	**15**	

Semester 4

COURSE	CR	COMMENTS
SOCIETY, DIVERSITY & CONNECTIONS GENERAL EDUCATION ELECTIVE	3	
CIT 240 INTRODUCTION TO LINUX	3	⚑ LINUX CERT.
COMM 111 ~FUNDAMENTALS OF SPEECH	3	
CS 260 COMPUTER SCIENCE CAPSTONE	3	🏆
SEC 101 SECURITY FUNDAMENTALS	3	🏆
TOTAL:	**15**	

The **Bachelor of Applied Technology in Software Engineering** provides the skills needed for success in software development, database design, website design and web applications, as well as other related fields. You'll be taught computer programming, web layout, database design and administration, networking and web applications.

MILESTONE COURSE:
These courses are the keys to graduation. Courses should be taken in the recommended semesters to stay on time for completion.

CAREER PLANNING:
Web Developer / Designer, Database Administrator, Software Developer

CAPSTONE COURSE:
A semester long project that must be taken in the graduation semester. A "C" or better must be earned. Software Development Fundamentals Certification.

Students should average 15 credit hours per semester, or 30 per year, to graduate on time.

TOTAL DEGREE CREDITS:
123

2021-2022

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Semester 5

COURSE	CR	COMMENTS
SEC 300 INTRO TO SECURITY	3	
STEM 300 ETHICS AND TECHNOLOGY	3	
UPPER LEVEL TECHNICAL ELECTIVE	2	
SOCIETY, DIVERSITY & CONNECTIONS GENERAL EDUCATION ELECTIVE	3	
CS 302 SOFTWARE ANALYSIS AND DESIGN	3	
TOTAL:	**14**	

Semester 6

COURSE	CR	COMMENTS
CS 309 OR CS 321	3	
CS 329 OR CS 420	3	
MATH 318 DISCRETE MATHEMATICS	3	
CS 320 OBJECT ORIENTED DESIGN	3	
ENGL 334 OR ENGL 308	3	
TOTAL:	**15**	

Semester 7

COURSE	CR	COMMENTS
STEM 420 PROJECT MANAGEMENT	3	🚩
UPPER LEVEL TECHNICAL ELECTIVE	3	
*THE ARTS & CREATIVITY GENERAL EDUCATION ELECTIVE	3	
CS 403 SOFTWARE ENGR & DATA STRUCTURE	3	
MATH 211 STATISTICS	3	
TOTAL:	**15**	

Semester 8

COURSE	CR	COMMENTS
HUMAN INQUIRY & THE PAST GENERAL EDUCATION ELECTIVE	3	
SCIENCE & TECHNOLOGY GENERAL EDUCATION ELECTIVE	4	
CS 329 OR CS 420	3	
CS 309 OR CS 321	3	🏆
CS 460 SENIOR PROJECT	3	
TOTAL:	**16**	

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2021-2022

To ensure breadth and depth as students meet these broad education goals, the curriculum focuses on six academic "strands."

Composition & Rhetoric	Science & Technology	Math & Quantitative Skill	Society, Diversity & Connections	Human Inquiry & the Past	The Arts and Creativity
ENGL 101	ASTR 106	MATH 120 *	COMM 105	HIST 101	**History & Literature of the Arts**
ENGL 102	BIOL 101 & BIOL 103 L	MATH 121	COMM 111	HIST 102	
ENGL 107*	BIOL 102	MATH 125 *	COMM 112	HIST 152	ART 101
ENGL 108*	BIOL 104 L	MATH 126	ECON 201	HIST 153	ART 105
	BIOL 107 *	MATH 128	ECON 202	HIST 250 *	ART 106
	BIOL 108 *	MATH 129	FREN 101	PHIL 111	MUSI 170
	BIOL 109 *	MATH 150	FREN 102	PHIL 150 *	THEA 101
	BIOL 115	MATH 155	GEOG 102	PHIL 170	**Literature**
	BIOL 117	MATH 156	GEOG 240		ENGL 131
	BIOL 171	MATH 211	POLS 102		ENGL 132
	CHEM 111		POLS 220		ENGL 221
	CHEM 115		PSYC 101		ENGL 222
	CHEM 116		PSYC 241		ENGL 241
	CS 101		RELI 231		ENGL 242
	GEOL 101 & GEOL 102 L		SOC 101		ENGL 261
	GEOL 103 & GEOL 104 L		SOC 105		ENGL 262
	GEOL 105 & GEOL 105 L		SOC 221		ENGL 285
	PSCI 111		SOC 232		**Applied Arts**
	PSCI 112		SPAN 101		ART 109
	PHYS 101		SPAN 102		THEA 102
	PHYS 102				**Creative Writing**
	PHYS 111				ENGL 213
	PHYS 112				ENGL 214
					ENGL 215

* Serves technical and professional degree programs specific to WVU Parkersburg. Does not transfer to WVU as General Education (March 2018).