



# WESTERN CATS

## Reverse Engineering

2019—2020

### Year One

Summer			
Course	Title	Units	Complete
MAT 187	Pre Calculus*	4	
ENG 101	Freshman Composition I	3	
Total		7	

### Semester One

Course	Title	Units	Complete
ENG 102	Freshman Composition II	3	
CHM 151	General Chemistry I	4	
MAT 220	Calculus I	5	
PHI 103	Intro to Logic	3	
AGEC-S	Art	3	
Total		18	

### Semester Two

Course	Title	Units	Complete
ECN 250	Microeconomics	3	
MAT 230	Calculus II w/ Geometry	5	
EGR 123	Intro to Structured Programming <sup>1</sup>	3	
PHY 121	Mechanics	4	
AGEC-S	Social Science	3	
Total		18	

Total Year 1 Credits 43

### Year Two

#### Semester Three

Course	Title	Units	Complete
MAT 241	Calculus III	4	
PHY 131	Electricity & Mag	4	
CSC 127a	Intro to Comp. Science I	4	
MAT 262	Intro to Ordinary Differential Equations	3	
AGEC-S	Humanities- WI	3	
Total		18	

#### Semester Four

Course	Title	Units	Complete
CSC 127b	Intro to Comp. Science II	4	
MAT 227	Discrete Mathematics	3	
CSC 252	Computer Organization	3	
CSC 210	Human Computer Interaction	4	
Arts/Humanities (AGEC) - Ex. MUS 120 for art		3	
Total		17	

Total Year 2 Credits 35

<sup>1</sup>Prerequisites include MAT 187 or MAT 151 & 183 or placement testing

\*Courses serve as pre-requisite, completion not required for degree

# Reverse Engineering

## Start UA Fall

## OR

## Start UA Spring

### Year Three

Fall - Semester Five			
Course	Title	Units	Complete
195	Introduction to UA	1	
CYBV 362	Intro Network Analysis	3	
CYBV 301	Fundamentals of Cyber Security	3	
INFV 320	Computational Thinking and Doing	3	
CYBV 385	Intro to Cyber Operations	3	
Total		13	

### Spring- Semester Six

Course	Title	Units	Complete
ETCV 391	Preceptorship	3	
BATSV 314	Mathematics for Applied Science	3	
CYBV 388	Cyber Investigations and Forensics	3	
CYBV 329	Cyber Law, Ethics & Policy	3	
CYBV 400	Active Cyber Defense	3	
Total		15	

### Year Four

#### Fall - Semester Seven

Course	Title	Units	Complete
ENGV 306	Advanced Composition	3	
CYBV 393	Internship in Cyber Operations	3	
CYBV 435	Cyber Threat Intelligence (435),	3	
CYBV 454	Malware Threats & Analysis		
GPSV 471	National Security & Intelligence		
Total		9	

#### Spring - Semester Eight

Course	Title	Units	Complete
CYBV 480	Cyber Warfare	3	
CYBV 498	Senior Capstone	3	
Total		6	

### Year Three

Spring- Semester Five			
Course	Title	Units	Complete
ASM 195	Introduction to UA	1	
CSCV 335	Object Oriented Programming	3	
CSCV 345	Discrete Structures	3	
AEDV 310	Transitional Resiliency	3	
Focus Area		6	
Total		16	

#### Fall - Semester Six

Course	Title	Units	Complete
CSCV 352	Systems Programming & UNIX	3	
CSCV 372	Comparative Programming Languages	3	
Focus Area		3	
ETCV 391	Preceptorship	3	
Total		12	

### Year Four

#### Spring - Semester Seven

Course	Title	Units	Complete
CSCV 452	Principles of Operating Systems	3	
CSCV 460	Database Design	3	
CSCV 473	Automata, Grammars, & Languages	3	
INFV 498	Senior Capstone	3	
Total		12	

#### Fall - Semester Eight

Course	Title	Units	Complete
CSCV 453	Compilers & Systems Software	3	
CSCV 381	Mobile Device Programming	3	
Focus Area		3	
INFV 393	Internship	3	
Total		12	