CERTIFICATES AND DEGREES

Technical Co	ertificate B	
Freshman: First Semester		
Course #	Course Name	Credits
APP 100	Object Oriented Programming	3
APP 105	Programming in Swift	3
APP 110	Front-end Web Development	3
APP 115	Software Planning	3
INF 101	Intro to Computer Information Systems (Required) ⁰⁷⁰	3
MATH 101	Contemporary Math (or College Algebra, Elem of Stats) ⁰³⁰	3
Freshman: S	Second Semester	
Course #	Course Name	Credits
APP 150	Software Design	4
APP 155	Design and Front-end Web Development	6
APP 160	Advanced Programming in Swift	4
APP 165	Blockchain Programming & Unit Testing	3
TEC 200	Workplace Ethics (or General Education Elective) ⁰⁶⁰	3
Total Certificate Credits		38

Associate of Applied Science		
	irst Semester	
Course #	Course Name	Credits
APP 100	Object Oriented Programming	
APP 105	Programming in Swift	
APP 110	Front-end Web Development	
APP 115	Software Planning	
INF 101	Intro to Computer Information Systems (Required) ⁰⁷⁰	3
MATH 101	Contemporary Math (or College Algebra, Elem of Stats) ⁰³⁰	3
Freshman: S	Second Semester	
Course #	Course Name	Credits
APP 150	Software Design	4
APP 155	Design and Front-end Web Development	E
APP 160	Advanced Programming in Swift	L
APP 165	Blockchain Programming & Unit Testing	
TEC 200	Workplace Ethics (or General Education Elective) ⁰⁶⁰	
Sophomore:	First Semester	
Course #	Course Name	Credits
APBE 195	Live Work I for Back-end	
APBE 200	API Development	3
APBE 205	Microservices and Serverless	
APBE 210	Database Management	3
ENG 101	English Composition I (Required) ⁰¹⁰	

FIN 205	Principles of Personal Finance (Required) ⁰⁷⁰	3
Sophomore:	Second Semester	
Course #	Course Name	Credits
APBE 250	Advanced API Development	3
APBE 255	Advanced Databases and Data Caches	3
APBE 295	Live Work II for Back-end	6
Total Degree Credits		68

Associate o	f Applied Science		
Freshman: F	Freshman: First Semester		
Course #	Course Name	Credits	
APP 100	Object Oriented Programming	3	
APP 105	Programming in Swift	3	
APP 110	Front-end Web Development	3	
APP 115	Software Planning	3	
INF 101	Intro to Computer Information Systems (Required) ⁰⁷⁰	3	
MATH 101	Contemporary Math (or College Algebra, Elem of Stats) ⁰³⁰	3	
Freshman: S	Second Semester	· · · · · · · · · · · · · · · · · · ·	
Course #	Course Name	Credits	
APP 150	Software Design	4	
APP 155	Design and Front-end Web Development	6	
APP 160	Advanced Programming in Swift	4	
APP 165	Blockchain Programming & Unit Testing	3	
TEC 200	Workplace Ethics (or General Education Elective) ⁰⁶⁰	3	
Sophomore	: First Semester		
Course #	Course Name	Credits	
APBC 195	Live Work I for Blockchain	3	
APBC 200	Intermediate Smart Contracts	3	
APBC 205	Intermediate Distributed Application Development	6	
ENG 101	English Composition I (Required) ⁰¹⁰	3	
FIN 205	Principles of Personal Finance (Required) ⁰⁷⁰	3	
Sophomore	: Second Semester		
Course #	Course Name	Credits	
APBC 250	Advanced Smart Contracts	3	
APBC 255	Advanced Distributed Application Development	3	
APBC 295	Live Work II for Blockchain	6	
Total Certific	ate Credits	68	

Application Development & Emerging Technologies (Development & Operations)			
Associate of	Associate of Applied Science		
Freshman: First Semester			
Course #	Course Name	Credits	
APP 100	Object Oriented Programming	3	

APP 105	Programming in Swift	3
APP 110	Front-end Web Development	3
APP 115	Software Planning	3
INF 101	Intro to Computer Information Systems (Required) ⁰⁷⁰	3
MATH 101	Contemporary Math (or College Algebra, Elem of Stats) ⁰³⁰	3
Freshman: S	Second Semester	
Course #	Course Name	Credits
APP 150	Software Design	4
APP 155	Design and Front-end Web Development	6
APP 160	Advanced Programming in Swift	4
APP 165	Blockchain Programming & Unit Testing	3
TEC 200	Workplace Ethics (or General Education Elective) ⁰⁶⁰	3
Sophomore	: First Semester	
Course #	Course Name	Credits
APDO 195	Live Work I for Development and Operations	3
APD0 200	Cloud Systems	3
APDO 205	CI/CD Continuous Integration/Continuous Deployment	3
APDO 210	Applications Security	3
ENG 101	English Composition I (Required) ⁰¹⁰	3
FIN 205	Principles of Personal Finance (Required) ⁰⁷⁰	3
Sophomore	: Second Semester	
Course #	Course Name	Credits
APDO 250	Advanced Scripting	2
APDO 255	System Monitoring and Billing	2
APDO 260	Container Management	2
APDO 295	Live Work II for Development and Operations	6
Total Certificate Credits		68

Application Development & Emerging Technologies (Front-end)		
Associate of	f Applied Science	
Freshman: F	First Semester	
Course #	Course Name	Credits
APP 100	Object Oriented Programming	7
APP 105	Programming in Swift	3
APP 110	Front-end Web Development	3
APP 115	Software Planning	3
INF 101	Intro to Computer Information Systems (Required) ⁰⁷⁰	3
MATH 101	Contemporary Math (or College Algebra, Elem of Stats) ⁰³⁰	3
Freshman: S	Second Semester	· · · · · · · · · · · · · · · · · · ·
Course #	Course Name	Credits
APP 150	Software Design	4
APP 155	Design and Front-end Web Development	6
APP 160	Advanced Programming in Swift	4
APP 165	Blockchain Programming & Unit Testing	3
TEC 200	Workplace Ethics (or General Education Elective) ⁰⁶⁰	3

Sophomore	: First Semester	
Course #	Course Name	Credits
APFE 195	Live Work I for Front-end	3
APFE 200	Intermediate Front-end Web Development	3
APFE 205	Native iOS Development	3
APFE 210	Native Android Development	3
ENG 101	English Composition I (Required) ⁰¹⁰	3
FIN 205	Principles of Personal Finance (Required) ⁰⁷⁰	3
Sophomore	: Second Semester	
Course #	Course Name	Credits
APFE 250	Native Development	3
APFE 255	Advanced Front-end Development	3
APFE 295	Live Work II for Front-end	6
Total Certificate Credits		68

Application Development & Emerging Technolgies (Product Design & Project Management) Associate of Applied Science

Freshman: First Semester

Freshman: F	Irst Semester	
Course #	Course Name	Credits
APP 100	Object Oriented Programming	3
APP 105	Programming in Swift	3
APP 110	Front-end Web Development	3
APP 115	Software Planning	3
INF 101	Intro to Computer Information Systems (Required) ⁰⁷⁰	3
MATH 101	Contemporary Math (or College Algebra, Elem of Stats) ⁰³⁰	3
Freshman: S	Second Semester	
Course #	Course Name	Credits
APP 150	Software Design	4
APP 155	Design and Front-end Web Development	6
APP 160	Advanced Programming in Swift	4
APP 165	Blockchain Programming & Unit Testing	3
TEC 200	Workplace Ethics (or General Education Elective) ⁰⁶⁰	3
Sophomore:	First Semester	
Course #	Course Name	Credits
APPD 195	Live Work I for Product Design	3
APPD 200	Responsive Design	3
APPD 205	UI/UX User Interface/User Experience	3
LDRS 200	Discovering Leadership	3
ENG 101	English Composition I (Required) ⁰¹⁰	3
FIN 205	Principles of Personal Finance (Required) ⁰⁷⁰	3
Sophomore:	Second Semester	
Course #	Course Name	Credits
APPD 250	Technical Project Management	3
APPD 255	Advanced UI/UX User Interface/User Experience	3

Total Certificate Credits

Systemwide General Education (SGE) Key

010 English 020 Communications 030 Math & Statistics 040 Natural & Physical Sciences 050 Social & Behavioral Science 060 Arts & Humanities 070 Institutionally Designated * Course descriptions for General Education courses can be found in the General Education section of the College Catalog.

