



2016 – 2017 SCIENCE, TECHNOLOGY, ENGINEERING, & MATH META-MAJOR



CERTIFICATE IN COMPUTER PROGRAMMING AND ANALYSIS

Meta-majors are academic pathways to help you meet your educational goals. Included below is a sample schedule for a full-time college student in a Certificate in Computer Programming and Analysis. While you may not be a full-time student, you are responsible for completing the “Mandatory Hourly Requirements” on the right. Please be advised that not all types of financial aid will cover the cost of summer semester courses.

COURSE RECOMMENDATIONS ARE BASED ON GENERAL COURSE REQUIREMENTS.

SAMPLE FULLTIME SCHEDULE

TERM 1	Courses
Required Course	CGS1000
Required Course	COP2220
Required Course	CGS1820
Required Course	CGS1520
TOTAL SEMESTER HOURS	12 HOURS
COMPLETED HOURS	12 HOURS

TERM 2	Courses
Required Course	CGS2540
Required Course	COP2830
Choose one of the three	COP2221 or COP2332 or COP2800
Required Course	MNA2130
TOTAL SEMESTER HOURS	12 HOURS
COMPLETED HOURS	24 HOURS

TERM 3	Courses
Required Course	CGS1060
Required Course	Program Elective *
Required Course	Program Elective *
TOTAL SEMESTER HOURS	9 HOURS
COMPLETED HOURS	33 HOURS

Please note some courses are only offered in specific semesters.

*Program Elective may be CGS, COP, CET, GRA, or IDS2941

MANDATORY HOURLY REQUIREMENT

By 12 Completed Credit Hours
Overall 2.0 TCC GPA or higher to graduate

By 24 Completed Credit Hours
Overall 2.0 TCC GPA or higher to graduate

By 33 Completed Credit Hours
Receive IC3 certification
Overall 2.0 TCC GPA or higher to graduate
25% credit hours earned at TCC

FALL SEMESTER	SPRING SEMESTER	SUMMER SEMESTER
CGS 1000	CGS 1000	CGS 1000
COP 2220	COP 2220	COP 2220
CGS 1820	CGS 1820	CGS 1820
CGS 1520	CGS 1520	COP 2332
CGS 2540	CGS 2540	COP 2800
COP 2830	COP 2830	CGS 1060
COP 2221	COP 2221	
MNA 2130	MNA 2130	
CGS 1060	CGS 1060	

*Please refer to the [TCC Catalog](#) for specific courses that meet this requirement.

Important Things to Know:

- Developmental Education courses are not included in this plan.

MAJORS & OCCUPATIONS IN THE SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM) META-MAJOR

MAJOR	OCCUPATION(S)	SUGGESTED ACADEMIC DEGREE(S)/LEVELS
Food & Nutrition Science or Exercise Science (Exercise Physiology, Master's & Doctoral Programs only)	Nutrition Consultant	B, M
	Food Product Developer	B, M
	Quality Control Analyst	B, M
	Health and Fitness Instructor/Advisor	B, M
	Clinical Exercise Physiologist	B, M
Biological Science	Laboratory Technician	B, M
	Biologist, Marine Biologist	B, M
	Crime Laboratory Analyst	B, M, D
	Zoologist	B, M, D
	Biology Professor	B, M
Computer Science	Database Administrator	B, M
	Software Designer/Engineer	B, M
	Software Quality Assurance Engineer	B, M
	Systems Analyst/Designer	B, M
	Web Developer	B, M
Help Desk/Technical Support or Web Technologies	Computer Support Specialist	AS, B, M
	Troubleshooting Specialist	AS, B, M
	Web Master	AS, B, M
	HTML Author	AS, B, M
	Site Designer	AS, B, M
Graphic Design Technology	Graphic Artist	AS
	Graphic Design Assistant	C, AS
	Marketing Assistant	AS
	Web page Designer	AS
	Associate Art Director	AS
Engineering	Structural Engineer	AS, B, M
	Transportation and Pipeline Engineer	AS, B, M
	Highway Engineer	AS, B, M
	Construction Engineer	AS, B, M
	Geotechnical Engineer	AS, B, M
Mathematics	Mathematician	B, M
	Teacher/Professor	B, M
	Economist	B, M
	Operations Research Analyst	B, M
	Statistician	B, M
Environmental Science Technology/Studies	Environmental Science & Protection Technician	AS
	Horticulturist	B
	Wetlands Ecologist	B
	Wildlife Conservationist	B
	Fish & Game Warden	B
Chemistry or Physics	Chemist	B
	Food & Drug Inspector	B
	Medical Laboratory Technician	B
	Biophysicist	B
	Biomedical Engineer	B
Meteorology	Meteorologist	B
	Weather Production Coordinator	B
	Storm Chaser	B
	Broadcast Meteorologist	B
	Air Traffic Controller	B

- C Certificate
- AS Associate in Science Degree
- B Bachelor's Degree
- M Master's Degree
- D Doctorate

**This sheet has sample majors & occupations associated with this meta-major. Some of these options may require additional training and career planning. You are not limited to these options when choosing a possible career path.*