



# 2014 – 2015 INDUSTRY, MANUFACTURING & CONSTRUCTION META-MAJOR

## ASSOCIATE IN SCIENCE (AS) IN DRAFTING AND DESIGN TECHNOLOGY-SURVEYING/GIS SPECIALIZATION

### **FALL SEMESTER START**

Meta-majors are academic pathways to help you meet your educational goals. Included below is a sample schedule for a full-time in college student on an Associate of Science degree track in Drafting and Design Technology-Surveying/GIS specialization. While you may not be a full-time student, you are responsible for completing the "Mandatory Hourly Requirements" on the right. Registration holds will be placed on students who do not meet the "Mandatory Hourly Requirements" and those students will be required to see an advisor. Summer semesters are not included in this plan but are an option for taking courses. 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**

#### **MANDATORY HOURLY REQUIREMENT**

TERM 1 - FALL SEMESTER	Suggested Courses	
1 <sup>st</sup> Gen Ed Communications Course	ENC1101	
Math requirement	MAC1105	
Program Requirement Course	SUR2533	
Program Requirement Course	EGS1111C**	
Program Requirement Course	SUR2390	
TOTAL SEMESTER HOURS	15 HOURS	
COMPLETED HOURS	15 HOURS	

By 15 Completed Credit Hours	
ENC1101	
Attend First Semester Advising Workshop	
Meet with an Advisor	
Declare a Meta-Major	
Overall 2.0 TCC GPA or higher to graduate	

TERM 2 - SPRING SEMESTER	Suggested Courses	
2nd Gen Ed Communications Course	ENC1102/ENC1141/MMC1100	
Program Requirement Course	ETD1320**	
Program Requirement Course	SUR2392	
Program Requirement Course	SBM2000	
Program Requirement Course	SUR2534	
Computer requirement	CGS1060 or CGS2100	
TOTAL SEMESTER HOURS	18 HOURS	
COMPLETED HOURS	33 HOURS	

By 18 Completed Credit Hours	
Overall 2.0 TCC GPA or higher to graduate	
Receive IC3 certification	
Receive AutoDesk AutoCAD certification	

TERM 3 - SUMMER SEMESTER (optional)	Suggested Courses	
Program Requirement Course	Any program course in summer	
Program Requirement Course	Any program course in summer	
Program Elective	Any college-credit course 2 credits	
TOTAL SEMESTER HOURS	OPTIONAL	

By 30 Completed Credit Hours	
ENC1102/ENC1141/MMC1100	
Overall 2.0 TCC GPA or higher to graduate	
Visit Career Center	

TERM 4 - FALL SEMESTER	Suggested Courses
Program Requirement Course	ETD2340**
Program Requirement Course	SUR2100C
Program Requirement Course	BCN1001
Program Requirement Course	IDS2182**
Any General Ed Humanities Course	*
TOTAL SEMESTER HOURS	15 HOURS
COMPLETED HOURS	48 HOURS

By 45 Completed Credit Hours	
Graduation Check Workshop	
Meet with Career Placement Coordinator in	
TCC Career Center	
Overall 2.0 TCC GPA or higher to graduate	

TERM 5 - SPRING SEMESTER	Suggested Courses
Program Requirement Course	ETD2563C
Program Requirement Course	ETD2390**
Program Requirement Course	SUR2220C
General Ed Social Science Course	*
Program Elective	Any college-credit course 2 credits
TOTAL SEMESTER HOURS	14 HOURS
COMPLETED HOURS	62 HOURS TO GRADUATE

LAST SEMESTER	
*** Apply for Graduation!!***	
Overall 2.0 TCC GPA or higher to graduate	

#### **CAD Foundations Certificate (15 hours)**

- •EGS1111C Engineering Graphics
- •ETD1320 Introduction to CAD
- •ETD2340 Advanced CAD
- •ETD2390 3d Auto CAD/Revit
- •IDS2182 Applied Ethics Seminar

#### Fire Sprinkler Design Technology Certificate (18 hours)

- ETD2563 C Fire Protection Design
- •EGS1111C Engineering Graphics
- •ETD1320 Introduction to CAD
- •ETD2340 Advanced CAD
- •ETD2390 3D Auto CAD/Revit
- •IDS2182 Applied Ethics Seminar

Drafting and Design, Surveying/GIS Specialization, A.S. (62 total hours)

<sup>\*</sup>Please refer to the <u>TCC Catalog</u> for specific courses that meet this requirement.

<sup>\*\*</sup> These courses will go towards both CAD certificate and Fire Sprinkler Certificate

## MAJORS AND OCCUPATIONS IN THE INDUSTRY, MANUFACTURING AND CONSTRUCTION META MAJOR

MAJOR	OCCUPATION(S)	SUGGESTED ACADEMIC DEGREE(S)/LEVELS
Building Construction Management	Foreman	A, B
	Assistant Superintendent	A, B
	Estimator	A, B
	Building Inspector	A, B
	Expeditor	А, В
	Drafter	A
Drafting and Design	Computer-aided Design (CAD) Technician	A
Drafting and Design Technology, AS	CAD Specialist	A
	Geographic Information System (GIS) Technician	A
	Assistant Surveyor	A
	Industrial Machinery Mechanic	A
Engineering Technology,	General/Operations Manager	A
AS	Production/Operations Worker/Supervisor	A
A3	Supervisor of Mechanics	A
	Installer/Repairer	A
	Operations Analyst/Manager	В, М
0	Productions Planner	B, M
Operations and	Logistics Specialist	B, M
Construction Management	Distribution Analyst/Manager	B, M
	Inventory Control Analyst/Manager	B, M
	Aircraft Crew Member	B, M
	Airport Management	B, M
Aeronautics	Air Traffic Controller	B, M
	Accident Investigation/Prevention Worker	B, M
	Aircraft Manufacturing Technician	B, M
	Aviation Team Leader	B, M
	Aviation Dispatcher	B, M
Aviation Business	Aviation Accountant	B, M
Administration	Aviation Training Instructor	B, M
	Aviation Technician	B, M
	Aviation Customer Service Rep.	B, M
	Aviation Development Engineer	В, М
Aviation Maintenance	Hydraulic and Systems Designer	B, M
	Manufacturing Engineer	B, M
	Technical Writer	B, M
	Front-line Supervisor of Production Workers	C
Computer Numerical	CNC Operator	C
Control (CNC) Machinist,	Machinist	С
Certificate	Lathe Operator	С
	Custom Shop Worker	С
	Aluminum Welder	C
Applied Welding Technologies, Certificate	Fabricator	С
	Fitter/Welder	С
	Brazer	С
	Solderer	С
	A/C, Refrigeration & Heating Helper	С
Hostina Vantilation and	A/C, Refrigeration & Heating Mechanic	C
Heating, Ventilation, and	A/C, Refrigeration & Heating Mechanic Assistant	
Air Conditioning (HVAC),		С
Certificate	A/C, Refrigeration & Heating Technician	C
C Certificate	Refrigeration Technician	

C Certificate

A Associate's Degree B Bachelor's Degree

M Master's Degree

D Doctorate