



Composite Technology

Student Learning Outcomes

- 1 Communication- The student will demonstrate the ability to communicate effectively using written and/or oral communication.
- 2 Information Literacy- The student will recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.
- 3 Problem Solving- The student will demonstrate the ability to analyze information and solve problems.
- 4 Workplace Skills - Demonstrates a mastery of workplace skills/soft skills, exhibits initiative, adapts to varied situations

Program Outcomes

- 1 Students will be able to compare and contrast the materials and processes associated with the composites industry
- 2 Students will be able to Fabricate composite components using the materials and processes associated with the composites industry.
- 3 Students will be able to Repair composite components using the materials and processes associated with the composites industry
- 4 Students will be able to perform basic NDI assessments on composite components using the equipment and processes associated with the NDI/Composites industry

Fall

Course #	Course Title	Credits	Function
CFT 101	Introduction to Composites	2	Technical Studies
CFT 106	Composite Finish Trim	2	Technical Studies
CFT 107	Composite Assembly	2	Technical Studies
CFT 130	Composite Fabrication Methods /Applications	2	Technical Studies
AVC 102	Precision Instruments	1	Technical Studies
AVC 110	Safety/OSHA 10	1	Technical Studies
AVC 112	Blueprint Reading	2	Technical Studies
AVC 117	Hand & Power Tools	4	Technical Studies
AVC 120	Introduction to Sealing	1	Technical Studies
AVC 140	Electrical Bonding & Grounding	1	Technical Studies

Spring

Course #	Course Title	Credits	Function
AVC 104	Quality Control Concepts	1	Technical Studies
AVC 105	Aircraft Familiarization	1	Technical Studies
AVC 107	Fundamentals for Aerospace Manufacturing	1	Technical Studies
AVC 108	Aircraft Systems & Components	4	Technical Studies
AVC 125	Bonding and Grounding	1	Technical Studies
MTH	Math Elective*	3	General Studies
	Humanities Elective*	3	General Studies

Summer

Course #	Course Title	Credits	Function
ENG 101	Composition I*	3	General Studies
	Communication Elective *	3	General Studies
	Technical Electives**	3	Elective

Fall

Course #	Course Title	Credits	Function
CFT 140	Composite Inspection	2	Technical Studies
CFT 141	Disassemble & Damage Removal Techniques	3	Technical Studies
CFT 142	Composite Repair	4	Technical Studies
CFT 143	Complex Composite Repairs	3	Technical Studies
CFT 144	Electrical Bonding Repair	1	Technical Studies

LEN 100	Lean for Operations	3	Technical Studies
	Social Science Elective*	3	General Studies

****Technical Electives**

Course #	Course Title	Credits	Function
AVC 103	Geometric Dimensioning & Tolerancing -		Elective
AVC 137	Precision Measuring		Elective
AVC 150	Human Factors		Elective
AVC 155	Aircraft Manufacturing Advanced Fastening Practices		Elective
AVC 160	Aircraft Control Surface Rigging		Elective
AVC 165	Technical Writing		Elective
AVC 170	Conflict Resolution		Elective
AVC 190	Aerospace Applied Learning		Elective

* **Kansas Systemwide General Education**

Technical Certificate, Composite Repair

Total Credits 45

Fall

Course #	Course Title	Credits	Function
CFT 101	Introduction to Composites	2	Technical Studies
CFT 106	Composite Finish Trim	2	Technical Studies
CFT 107	Composite Assembly	2	Technical Studies
CFT 130	Composite Fabrication Methods /Applications	2	Technical Studies
AVC 102	Precision Instruments	1	Technical Studies
AVC 110	Safety/OSHA 10	1	Technical Studies
AVC 112	Blueprint Reading	2	Technical Studies
AVC 117	Hand & Power Tools	4	Technical Studies
AVC 120	Introduction to Sealing	1	Technical Studies
AVC 125	Bonding and Grounding	1	Technical Studies
AVC 140	Electrical Bonding & Grounding	1	Technical Studies

Spring

Course #	Course Title	Credits	Function
AVC 104	Quality Control Concepts	1	Technical Studies
AVC 105	Aircraft Familiarization	1	Technical Studies

AVC 107	Fundamentals for Aerospace Manufacturing	1	Technical Studies
AVC 108	Aircraft Systems & Components	4	Technical Studies
	Communication Elective *	3	General Studies

Fall

Course #	Course Title	Credits	Function
CFT 140	Composite Inspection	2	Technical Studies
CFT 141	Disassemble & Damage Removal Techniques	3	Technical Studies
CFT 142	Composite Repair	4	Technical Studies
CFT 143	Complex Composite Repairs	3	Technical Studies
CFT 144	Electrical Bonding Repair	1	Technical Studies
	Humanities Elective*	3	General Studies

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Technical Certificate, Composite Fabrication

Total Credits 20

Fall

Course #	Course Title	Credits	Function
CFT 101	Introduction to Composites	2	Technical Studies
CFT 106	Composite Finish Trim	2	Technical Studies
CFT 107	Composite Assembly	2	Technical Studies
CFT 130	Composite Fabrication Methods /Applications	2	Technical Studies
AVC 102	Precision Instruments	1	Technical Studies
AVC 110	Safety/OSHA 10	1	Technical Studies
AVC 112	Blueprint Reading	2	Technical Studies
AVC 117	Hand & Power Tools	4	Technical Studies
AVC 120	Introduction to Sealing	1	Technical Studies
AVC 140	Electrical Bonding & Grounding	1	Technical Studies

Spring

Course #	Course Title	Credits	Function
AVC 104	Quality Control Concepts	1	Technical Studies
AVC 105	Aircraft Familiarization	1	Technical Studies

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