

# Cost Analysis Report

## Avionics System

For each Learning Objective, compares the cost and time requirements of current delivery option to recommended media, and highlights potential savings.

Learning Objective	Media	Current		Media	Recommended		Savings	
		Cost	Time [hours]		Cost	Time [hours]	Cost	Time [hours]
Describe General Safety Practices	Lecture	\$174,555	1.67	CBT 2	\$120,420	1.17	\$54,135	0.5
Describe Basic Soldering Function	Lecture	\$86,755	0.83	CBT 1	\$59,849	0.58	\$26,905	0.25
Describe the Soldering Process	Lecture	\$86,755	0.83	CBT 2	\$59,849	0.58	\$26,905	0.25
Describe the Soldering Iron	Lecture	\$86,755	0.83	Lecture	\$86,755	0.83	\$0	0
Conduct Rework and Repair	Lecture	\$86,755	0.83	Lecture	\$86,755	0.83	\$0	0
Clean EWIS for Soldering	Lecture	\$86,755	0.83	Lecture	\$86,755	0.83	\$0	0
Describe Wire Termination	Lecture	\$86,755	0.83	Lecture	\$86,755	0.83	\$0	0
Conduct Wire Termination	Practice	\$558,648	5	Practice	\$558,648	5	\$0	0
Describe Handling Procedure of Circuit Boards	Lecture	\$86,755	0.83	Lecture	\$86,755	0.83	\$0	0
Describe Circuit Boards Components	Lecture	\$174,554	1.67	Lecture	\$174,554	1.67	\$0	0
Configure Circuit Boards	Practice	\$745,236	6.67	Practice	\$745,236	6.67	\$0	0
Insulate Aircraft Wires	Practice	\$92,735	0.83	Practice	\$92,735	0.83	\$0	0
Describe Electromagnetic Interface	Lecture	\$174,555	1.67	Lecture	\$174,555	1.67	\$0	0
Describe Bonding Classes	Lecture	\$174,555	1.67	Lecture	\$174,555	1.67	\$0	0
Test Bonds & Grounds	Practice	\$92,735	0.83	Practice	\$92,735	0.83	\$0	0
Test Static Wicks	Practice	\$92,735	0.83	Practice	\$92,735	0.83	\$0	0
Conduct Static Test Procedure	Practice	\$87,222	0.83	Practice	\$87,222	0.83	\$0	0
Identify Various Type of Wires	Lecture	\$174,555	1.67	CBT 1	\$120,420	1.17	\$54,135	0.5
Mark Wires	Practice	\$86,755	0.83	CBT 2	\$59,849	0.58	\$26,905	0.25
Describe Hardware Maintenance Procedures	Lecture	\$174,555	1.67	CBT 2	\$120,420	1.17	\$54,135	0.5
Tie and Lance Wire Bundles	Practice	\$279,324	2.5	Practice	\$279,324	2.5	\$0	0
Describe Electronic Connectors	Lecture	\$261,309	2.5	CBT 1	\$180,269	1.75	\$81,040	0.75
Front and Rear Release Connector	Practice	\$186,588	1.67	Practice	\$186,588	1.67	\$0	0
Describe Radio Frequency Cables	Lecture	\$174,555	1.67	Lecture	\$174,555	1.67	\$0	0
Crimp and Attach RF Connectors to Coaxial Cables	Lecture	\$43,900	0.42	CBT 2	\$30,285	0.29	\$13,615	0.13
Describe Test Equipment	Lecture	\$86,755	0.83	Lecture	\$86,755	0.83	\$0	0
Conduct RF Maintenance Connector Procedure	Practice	\$1,303,883	11.67	Practice	\$1,303,883	11.67	\$0	0
Lockwire Multiple Connectors Coax Connectors	Practice	\$92,735	0.83	Practice	\$92,735	0.83	\$0	0
Shearwire Guarded Switches	Practice	\$92,735	0.83	Practice	\$92,735	0.83	\$0	0
Describe Data Busses	Lecture	\$43,900	0.42	CBT 1	\$30,285	0.29	\$13,615	0.13
Outline Fault Detection Procedures	Lecture	\$43,900	0.42	CBT 1	\$30,285	0.29	\$13,615	0.13
Interpret Technical Drawings	Lecture	\$174,555	1.67	CBT 2	\$120,420	1.17	\$54,135	0.5
Trace Signal Flow and Power	Practice	\$186,588	1.67	Practice	\$186,588	1.67	\$0	0
Interpret Aircraft Components Location Diagrams	Lecture	\$261,309	2.5	CBT 2	\$180,269	1.75	\$81,040	0.75
Conduct Walk Around and Safety Brief	Practice	\$87,222	0.83	Practice	\$87,222	0.83	\$0	0
Describe EWIS Troubleshooting Techniques	Lecture	\$86,755	0.83	CBT 2	\$59,849	0.58	\$26,905	0.25
Describe EWIS Inspection Techniques	Lecture	\$86,755	0.83	CBT 2	\$59,849	0.58	\$26,905	0.25
Describe EWIS Cleaning Techniques	Lecture	\$86,755	0.83	CBT 2	\$59,849	0.58	\$26,905	0.25
Describe Corrosion Preventive Compounds	Lecture	\$86,755	0.83	CBT 2	\$59,849	0.58	\$26,905	0.25
Apply Corrosion Preventive Compounds	Practice	\$279,324	2.5	Practice	\$279,324	2.5	\$0	0
Describe Electrical Power System Components	Lecture	\$43,900	0.42	CBT 1	\$30,285	0.29	\$13,615	0.13
Describe Electrical Power System Operations	Lecture	\$86,755	0.83	CBT 2	\$59,849	0.58	\$26,905	0.25
Describe Various Aircraft Electrical Power Systems	Lecture	\$43,900	0.42	CBT 1	\$30,285	0.29	\$13,615	0.13
Classify Electrical Loads	Lecture	\$86,755	0.83	CBT 1	\$59,849	0.58	\$26,905	0.25

Describe Electrical Power System Redundancy	Lecture	\$86,755	0.83	CBT 1	\$59,849	0.58	\$26,905	0.25
Describe DC Generators	Lecture	\$86,755	0.83	CBT 1	\$59,849	0.58	\$26,905	0.25
Analyze Aircraft AC Generator	Simulation	\$348,064	3.33	Simulation	\$348,064	3.33	\$0	0
Describe Auxiliary Power Units Types	Lecture	\$43,900	0.42	CBT 1	\$30,285	0.29	\$13,615	0.13
Apply Ground Power to Aircraft	Practice	\$175,495	1.67	Practice	\$175,495	1.67	\$0	0
Maintain Aircraft Battery System	Practice	\$465,912	4.17	Practice	\$465,912	4.17	\$0	0
Describe Aircraft Power Distribution System	Lecture	\$86,755	0.83	CBT 1	\$59,849	0.58	\$26,905	0.25
Describe Distribution System Architecture	Lecture	\$86,755	0.83	CBT 1	\$59,849	0.58	\$26,905	0.25
Monitor Load	Lecture	\$86,755	0.83	CBT 2	\$59,849	0.58	\$26,905	0.25
Operate Single Engine Aircraft	Simulation	\$261,309	2.5	Simulation	\$261,309	2.5	\$0	0
Operate Twin Engine Aircraft	Simulation	\$261,309	2.5	Simulation	\$261,309	2.5	\$0	0
Operate Multi-Engine Aircraft	Simulation	\$261,309	2.5	Simulation	\$261,309	2.5	\$0	0
<b>Total</b>		<b>\$9,868,665</b>	<b>92</b>		<b>\$9,031,671</b>	<b>84</b>	<b>\$836,980</b>	<b>8</b>