

OCAS Course Number and Name	Choice of Assessment/Certification Test				Hrs.
	Certification - Owner of Test	PLTW Micro-Credential	Precision Exams by YouScience Micro-Credential	Other Micro-Credential	

2024-2025 STEM Credential/Certification Guide

8704 Advanced Biotechnology I • Prerequisite Course: BioTech II	Biotility – University of Florida: Biotechnician Assistant Credentialing Exam (8584) CLEP Natural Science (6405)		Biotechnology (8583)		120 hrs.
8717 Advance Biotechnology II • Prerequisite Course: Advanced BioTech I	Biotility – University of Florida: Biotechnician Assistant Credentialing Exam (8584) CLEP Natural Science (6405)		Biotechnology (8583)		120 hrs.
8826 Advanced Design Applications • Prerequisite Course: Engineering Design	Certiport: • Autodesk Inventor Certified User (2756) • Autodesk Revit Certified User (2757)		Engineering Principles I (4598) Engineering Principles II (4599)	Engineering by Design: Engineering Design (4601) Adv Game Art Design (4602)	120 hrs.
8882 Advanced Mechanical Design Engineering • Ok Promise Computer Credit	Certiport: Autodesk Fusion 360 Certified User (2764)			MakerBot: MakerBot 3D Printing (0624)	120 hrs.
8160 Advanced Programming • Prerequisite Course: None • OK Promise Computer Credit	AP Computer Science A Exam (1727) OU: Code Sooner (0207) Certiport: Information Technology Specialist Java (*) Information Technology Specialist Python (0272)		Choose 1: Computer Program IA (0210) Computer Program II Java (0211)	SHL Talent Central: Java (0691) TOSA: JavaScript	120 hrs.
8866 Advanced Robotics Engineering • Prerequisite Course: <i>Robotic Engineering</i> • OK Promise Computer Credit	Certiport: Autodesk Inventor Certified User (2756) National Coalition of Certification Center: Fundamentals of Robotics (1483) Applied Robotics (1484)		Robotics II (4594)	REC Foundations: Robotics (4595) Pre-Engineering (4596) Carnegie Mellon University: Coding and Computational Thinking with VEX V5 (0203) MakerBot: MakerBot 3D Printing (0624)	120 hrs.
8825 Advanced Technological Applications • Prerequisite Course:				MakerBot: MakerBot 3D Printing (0624)	120 hrs.
8862 Advanced Tech for Design Production Prerequisite Course:	Certiport: Autodesk Inventor Certified User (2756) Certiport: Autodesk Revit Certified User (2757)			Engineering by Design: Engineering Design (4601) Adv Game Art Design (4602)	120 hrs.
8868 Aeroponics/Hydroponics/Aquaponics • Prerequisite Course: None					120 hrs.
Aerospace Capstone	Remote Pilot Certificate - FAA 107 (2424) Private Pilot Airplane – FAA Part 61 (2421)				
8859 Aerospace I • Prerequisite Course:					120 hrs.

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8885 Aircraft Materials and Corrosion Control	Choose Aerospace Certificate (2430)				120 hrs.
2535 AP Computer Science A (CSA) <ul style="list-style-type: none"> Prerequisite Course: None OK Promise Computer Credit 	AP Computer Science A Exam (1727) OU: Code Sooner (0207) Certiport: Information Technology Specialist Java (*) Information Technology Specialist JavaScript (*)	PLTW EoC Computer Science A (4616)	Computer Program IA (0210) Computer Program II Java (0211) Computer Programming IB Java (0212)	SHL Talent Central: Java 8 (0691) CodeHS Java 1 (0204)	120 hrs.
2536 AP Computer Science Principles <ul style="list-style-type: none"> Prerequisite Course: None OK Promise Computer Credit 	AP Computer Science Principles (1722) Certiport: IT Specialist JavaScript (*)	PLTW EoC CS Principles (4614)	Computer Programming IB Java (0212) Computer Programming II Java (0211)	CodeHS JavaScript 1 (0205)	120 hrs.
8886 Applied Sciences of Aircraft Maintenance	Choose Aerospace Certificate (2430)				120 hrs.
8903 Architecture Computer Aided Drafting and Design <ul style="list-style-type: none"> Prerequisite Course: None OK Promise Computer Credit 	Certiport: Autodesk Revit Certified User (2757) Autodesk AutoCAD Certified User (2755)		CAD Architectural Design I (2709) CAD Architectural Design II (2710)		120 hrs.
8880 Architecture Design Engineering	Certiport: Autodesk Revit Certified User (2757) Autodesk AutoCAD Certified User (2755)				120 hrs.
8874 Aviation I Launching into Aviation Exploring Aviation & Aerospace	Remote Pilot Certificate - FAA 107 (2424) Private Pilot Airplane – FAA Part 61 (2421) UAS Operator (2429) Trust Certificate (2420)				120 hrs.
8875 Aviation II Introduction to Flight Aircraft Systems & Performance	Remote Pilot Certificate - FAA 107 (2424) Private Pilot Airplane – FAA Part 61 (2421) UAS Operator (2429) Trust Certificate (2420)				120 hrs.
8876 Aviation III The Flying Environment & Nav Human Factors UAS Theory & Operations	Remote Pilot Certificate - FAA 107 (2424) Private Pilot Airplane – FAA Part 61 (2421) UAS Operator (2429) Trust Certificate (2420)				120 hrs.
Aviation IV	Remote Pilot Certificate - FAA 107 (2424) Private Pilot Airplane – FAA Part 61 (2421) UAS Operator (2429) Trust Certificate (2420)				120 hrs.
8887 Basic Electricity	National Coalition of Certifications Center: Introduction to Exploring Electricity (1469) Fundamentals of Electricity – AC (1470) Fundamentals of electricity – DC (1471) NCATT: (AET) Aircraft Electronics Technician (2434)				120 hrs

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8718 Biomedical Health Careers • Prerequisite Course:	ODCTE: Workplace Readiness Skills (0454) ODCTE: Job Seeking & Retention Skills (0455)		21 st Century Success Skills (0448) Preparing for College & Careers (0447) Medical Forensics (8762)	Microburst Learning: Employability Soft Skills (0460)	120 hrs.
8702 Biotechnology I • Prerequisite Course: Survey of BioTech	Biotechnology- NOCTI (8582) CLEP Biology (6404)		Biotechnology (8583) Health Science, Introduction (8767)		120 hrs.
8703 Biotechnology II • Prerequisite Course: Biotech I • OK Promise Science Credit	Biotechnology – NOCTI (8582) CLEP Biology (6404)		Biotechnology (8583)		120 hrs.
8867 Computer Science Discoveries • Prerequisite Course: None • OK Promise Computer Credit	Certiport: Internet & Computing Core Certification (IC ³) (0905)		Exploring Computer Science (1725) Code.org End of Course Exam*	ODCTE: Fundamentals of Technology (0901)	120 hrs.
8852 Computer Science Essentials • Prerequisite Course: None • OK Promise Computer Credit	Certiport: Internet & Computing Core Certification (IC ³) (0905)	PLTW EoC CS Essentials (4617)	Computer Technology (0902) IT, Introduction (1108)	SHL Talent Central: Computer Fundamentals (0951) Computer Literacy (0969)	120 hrs.
8860 Computer Science Principles • Prerequisite Course: • OK Promise Computer Credit	AP Computer Science Principles (1722) Certiport: IT Specialist Python (0272)	PLTW EoC CS Principles (4614)	Computer Programming IA (0210)		120 hrs.
8856 Core Applications of Science & Technology • Prerequisite Course: The Nature of Science and Technology					120 hrs.
8858 Creativity & Innovations • Prerequisite Course: Impact of Science & Technology				MakerBot: MakerBot 3D Printing (0624)	120 hrs.
8720 Crime Scene Investigation (CSI) • Prerequisite Course: Biology I					120 hrs.
8256 Cybersecurity Basics • Prerequisite Course: None • OK Promise Computer Credit	Certiport – Cisco: CCST-Cybersecurity (0114) CCST-Networking (0115)			Cisco Badge: Cyber Threat Manger (*) Networking Defense (*) Network Support (*) Network Troubleshooting (*)	120 hrs.
8865 Design for the Production of Advanced Products • Prerequisite Course:	Certiport: Autodesk Revit Certified User (2757)			MakerBot: MakerBot 3D Printing (0624)	120 hrs.

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8149 Desktop Publishing • OK Promise Computer Credit	Certiport: ACP Print & Digital Media Publications Using Adobe InDesign(0298) ACP Visual Design Using Adobe Photoshop (0992) ODCTE: Graphic Designer (4112)		Desktop Publishing I 248 (4158) Desktop Publishing II 249 (4159) Digital Print Design (0264)	TOSA: InDesign (0130) Photoshop (0132) SHL Talent Central: Adobe InDesign (0262)	120 hrs.
8904 Engineering Computer Aided Drafting and Design • Prerequisite Course: None	Certiport: Autodesk Revit Certified User (2757) Autodesk AutoCAD Certified User (2755)		CAD Mechanical Design I (2706) CAD Mechanical Design II (2707)		120 hrs.
8827 Engineering Design • Prerequisite Course: None	Certiport: Autodesk Inventor Certified User (2756) Certiport: Autodesk Revit Certified User (2757)		Engineering Technology (4597) Engineering Principles I (4598) Engineering Principles II (4599)	MakerBot: MakerBot 3D Printing (0624)	120 hrs.
8878 Engineering Essentials • Prerequisite Course: None	ESRI ArcGIS Desktop Entry (2763)	PLTW EoC: Engineering Essentials (4619)		REC Foundation: Pre-Engineering Certificate (4596) Robotic Certification (*)	120 hrs.
8905 Fundamentals of Computer Aided Drafting •OK Promise Computer	Certiport: Autodesk AutoCAD Certified User (2755) Autodesk Revit Certified User (2757)				
8169 Fundamentals of Technology • Prerequisite Course: None • OK Promise Computer Credit	Certiport: IC3 Spark (0906)		Computer Technology (0902) IT, Introduction (1108) Digital Business Applications (0563)	SHL Talent Central: Computer Fund (0951) Computer Literacy (0969) ODCTE: Fund of Technology (0901)	120 hrs.
8153 Fundamentals of Web •Prerequisite Course: None •OK Promise Computer Credit	Certiport: ACP Web Authoring Using Dreamweaver (0993)		Business Web Page Design 254 (0326) Adv Business Web Page Design 256 (0327)	IE Class: Web Design (0325)	120 hrs.
8873 Google Tools • Prerequisite Course: None • OK Promise Computer Credit	Google: Google Workspace (0142)				120 hrs.
8857 Impact of Science & Technology • Prerequisite Course: Core Applications of Science and Technology					120 hrs.

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8255 Internet of Things (IoT) Fundamentals <ul style="list-style-type: none"> Prerequisite Course: None OK Promise Computer Credit 	Cisco: End of Course Exam (1107)		Network Fundamentals (1151) Computer Programming IB Python (0208)	TOSA: Python (0126)	120 hrs.
8709 Introduction to Engineering Design <ul style="list-style-type: none"> Prerequisite Course: None OK Promise Computer Credit 	Certiport: Autodesk Inventor Certified User (2756) Certiport: Autodesk Fusion 360 Certified User (2764)	PLTW EoC Introduction to Engineering Design (4611)			120 hrs.
8953 Introduction to Manufacturing <ul style="list-style-type: none"> Prerequisite Course: None 				MakerBot: MakerBot 3D Printing (0624)	120 hrs.
8879 Mechanical Design Engineering <ul style="list-style-type: none"> Prerequisite Course: None 	Certiport: Autodesk Inventor Certified User (2756)			MakerBot: MakerBot 3D Printing (0624)	
8864 Mechatronic Systems for Advanced Production <ul style="list-style-type: none"> Prerequisite Course: 	Certiport: Autodesk Revit Certified User (2757)				120 hrs.
8150 Multimedia & Image Manage Tech <ul style="list-style-type: none"> Prerequisite Course: None OK Promise Computer Credit 	Certiport: <ul style="list-style-type: none"> ACP Visual Com using Photoshop (0992) ACP Graphic Design. & Ill. using Illustrator (0297) 		Digital Media IA 810 (4160) Digital Media II (4162)	TOSA: Illustrator (0131) Photoshop (0132) Presentations Skills (961)	120 hrs.
8855 Nature of Science & Technology Prerequisite Course: None					120 hrs.
8715 PLTW Aerospace Engineering <ul style="list-style-type: none"> Prerequisite Course: OK Promise Science Credit 	Certiport: <ul style="list-style-type: none"> Autodesk Fusion 360 Certified User (2764) Autodesk Inventor Certified User (2756) 	PLTW EoC Aerospace Engineering (4604)			120 hrs.
8719 PLTW Biomedical Innovation (Capstone) <ul style="list-style-type: none"> Prerequisite Course: 2 PLTW courses OK Promise Science Credit 	Biotility – University of Florida: Biotechnician Assistant Credentialing Exam (8584)	Capstone (None)	National Health Science Assessment (8001) Medical Forensics (8762)		120 hrs.
8716 PLTW Capstone <ul style="list-style-type: none"> Prerequisite Course: SDE approved Capstone 	Certiport: Autodesk Inventor Certified User (2756) Certiport: Autodesk Revit Certified User (2757)	Capstone (None)			120 hrs.

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8713 PLTW Civil Engineering & Architecture • Prerequisite Course:	Certiport: Autodesk Revit Certified User (2757)	PLTW EoC Civil Engineering and Architecture (4607)			120 hrs.
8712 PLTW Computer Integrated Manufacturing • Prerequisite Course: • OK Promise Computer Credit	Certiport: Autodesk Inventor Certified User (2756) MSSC Certified Production Technician (3975) NIMS CNC Mill Operations (2903)	PLTW EoC Computer Integrated Manufacturing (4608)			120 hrs.
8861 PLTW Cybersecurity • Prerequisite Course:	Certiport: ▪ CCST-Cybersecurity (0114) ▪ CCST-Networking (0115)	PLTW EoC Cybersecurity (4618)		Cisco Badge: Cyber Threat Manger (*) Networking Defense (*) Network Support (*) Network Troubleshooting (*)	120 hrs.
8711 PLTW Digital Electronics • Prerequisite Course: • OK Promise Math Credit	Certified Electronics System Assoc. (CETa) (4055)	PLTW EoC Digital Electronics (4603)			120 hrs.
8878 (PLTW) Engineering Essentials Prerequisite Course: None		PLTW EoC: Engineering Essentials (4619)			120 hrs.
8854 PLTW Environmental Sustainability • Prerequisite Course: • OK Promise Science Credit		PLTW EoC Environmental Sustainability (4613)			120 hrs.
8707 PLTW Human Body Systems • Prerequisite Course: • OK Promise Science Credit		PLTW EoC Human Body System (4609)	Medical Anatomy & Physiology (8768)		120 hrs.
8709 (PLTW) Introduction to Engineering Design • Prerequisite Course: None • OK Promise Computer Credit	Autodesk: Revit Certified User (2757)	PLTW EoC Introduction to Engineering Design (4611)		Solid Professor: OnShape Certified Associate (*)	120 hrs.
8708 PLTW Medical Interventions • Prerequisite Course: • OK Promise Science Credit	Biotility – University of Florida: Biotechnician Assistant Credentialing Exam (8584)	PLTW EoC Medical Intervention (4612)	Medical Forensics (8762)		120 hrs.

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8706 PLTW Principles of Biomedical Science <ul style="list-style-type: none"> Prerequisite Course: OK Promise Science Credit 		PLTW EoC Principles of Biomedical Science (4606)	Health Science, Introduction (8767)		120 hrs.
8710 (PLTW) Principles of Engineering <ul style="list-style-type: none"> Prerequisite Course: None OK Promise Computer Credit 	Certiport: Autodesk Fusion 360 (2764)	PLTW EoC Principles of Engineering (4610)			120 hrs.
8871 Python <ul style="list-style-type: none"> Prerequisite Course: None OK Promise Computer Credit 	Python Institute: Python Certified Association Programmer (*) Certiport: IT Specialist Python (0272)		Computer Programming II Python (0209)		120 hrs.
8884 Regulations and Ground Operation <ul style="list-style-type: none"> Prerequisite Course: None 	Choose Aerospace Certificate (2430)				120 hrs.
8872 Renewable Energy <ul style="list-style-type: none"> Prerequisite Course: None 					120 hrs.
8833 Robotics Engineering <ul style="list-style-type: none"> Prerequisite Course: None OK Promise Computer Credit 	National Coalition of Certification Center: Fundamentals of Robotics (1483) Applied Robotics (1484)		Robotics I (4593)	REC Foundations: Robotics (4595) Pre-Engineering (4596) Carnegie Mellon University: Coding and Computational Thinking with VEX V5 (0203) MakerBot: MakerBot 3D Printing (0624)	120 hrs.
8834 Robotics Engineering & Automation <ul style="list-style-type: none"> Prerequisite Course: Robotics Engineering 			Robotics I (4593)	REC Foundations: Robotic Certification (4595) Carnegie Mellon University: Coding and Computational Thinking with VEX V5 (0203)	120 hrs.
8849 Science and Technical Visualization I <ul style="list-style-type: none"> Prerequisite Course: 	Autodesk: Inventor Certified User (2756) Autodesk Fusion 360 Certified User (2764)		3D Graphics (0608)		120 hrs.
8850 Science and Technical Visualization II <ul style="list-style-type: none"> Prerequisite Course: Science and Technical Visualization I 	Autodesk: Inventor Certified User (2756) Autodesk Fusion 360 Certified User (2764)		3D Graphics (0608)		120 hrs.
8870 Space Engineering Concepts <ul style="list-style-type: none"> Prerequisite Course: None OK Promise Computer Credit 	AGI: STK Certification Level 1 (2422) AGI: STK Certification Level 2 (2423) AGI: STK Certification Level 3 (*)				120 hrs.

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8705 STEM Capstone <ul style="list-style-type: none"> Prerequisite Course: At least 240 hours in related 	No tests required for this course. It is used to demonstrate mastery in the field through the pursuit of advanced certifications, complete advanced projects with limited supervision, or used for an OJT (on the job training) component.				120 hrs.
8869 STEM Core <ul style="list-style-type: none"> Prerequisite Course: Technology Center only 	Test will vary			Microburst Learning: Employability Soft Skills (0460)	120 hrs.
8701 Survey of Biotechnology <ul style="list-style-type: none"> Prerequisite Course: None 	Biotechnology NOCTI (8582)		Health Science, Introduction (8767)		120 hrs.
8863 System of Advanced Technology <ul style="list-style-type: none"> Prerequisite Course: 				MakerBot: MakerBot 3D Printing (0624)	120 hrs.
8848 Technological Design <ul style="list-style-type: none"> Prerequisite Course: Technology and Society 	Certiport: Autodesk Inventor Certified User (2756) Certiport: Autodesk Revit Certified User (2757) Certiport: Autodesk AutoCAD (2755)			Engineering by Design: Engineering Design (4601) Adv Game Art Design (4602) Apple: Final Cut Pro (0295) MakerBot: MakerBot 3D Printing (0624)	120 hrs.
8847 Technology and Society <ul style="list-style-type: none"> Prerequisite Course: Technology Foundations 					120 hrs.
8828 Technology Foundations <ul style="list-style-type: none"> Prerequisite Course: None 	Certiport: Autodesk AutoCAD (2755)		CAD Architectural Design I (2709)	Engineering by Design: Engineering Design (4601) Adv Game Art Design (4602)	120 hrs.
8881 Virtual Reality (VR) Coding <ul style="list-style-type: none"> Prerequisite Course: None 	Certiport: Unity Certified User Programmer (0206) Unity Certified user: VR Developer (0189) Unity Certified user: Artist (0190)				120 hrs.
4615 AP Calculus - AB	AP Calculus -- AB (0080)				
4616 AP Calculus - BC	AP Calculus – BC (0081)				
4760 AP Statistics	AP Statistics (0082)				
5213 AP Physics I – Algebra Based	AP Physics 1 – Algebra Based (4589)				
5214 AP Physics II – Algebra Based	AP Physics 2 – Algebra Based (4590)				
5216 AP Physics C – Mechanics	AP Physics C – Mechanics (4591)				
5217 AP Physics C – Electricity & Magnetism	AP Physics C – Electricity & Mag (4592)				

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5121 AP Environmental Science	AP Environmental Science (6401)				
5035 AP Biology	AP Biology (6402)				
5055 AP Chemistry	AP Chemistry (6403)				
	CLEP College Algebra (0083)				
4614 AP Pre-Calculus	AP Pre-Calculus (0084)				

Approved Assessment List: <https://oklahoma.gov/careertech/testing-center/ok-competency-testing.html>

Use above link for find assessment code, name, assessment vendor, cluster, cost, work keys, SOC, ONET Level, PLA, CCA, etc.

Approved Assessment Request form: <http://www.okcareertech.org/educators/assessments-and-testing/testing>

Use the above link to request a test for approval.

Cooperative Alliance information: list of participating colleges, degrees, technology centers, assessments, and Prior Learn Assessment (PLA) Matrix <https://showwhatyouknowok.org/careertech-occupational-licenses/> (Transfer Courses)