

AGRICULTURE, FOOD & NATURAL RESOURCES

For incoming freshmen beginning 2020–2021



OVERVIEW

The Agriculture, Food and Natural Resources Jump Start 2.0 Pathway immerses students in the fields of agriculture and related sciences. This pathway equips students with the knowledge of basic animal, plant, and soil science; plant cultivation and soil conservation; and agricultural operations such as farming, ranching, and logging. Pathway coursework also provides instruction in subjects such as climate, air, soil, water, land, fish, wildlife, and plant resources; basic principles of environmental science and natural resource management; and agricultural business. Students will also learn of the recreational and economic uses of renewable and nonrenewable natural resources.

COLLEGE AND CAREER CONNECTIONS

Finding high-wage career opportunities directly out of high school can be challenging. It typically requires advanced capstone credentials accompanied by work experience and/or apprenticeships in the field.

High School to Career	Community/Technical College to Career	University to Career
Crop Scout and Farm Laborer	Agricultural Mechanics Technology Technician	Ag Ed Leadership
Meat, Poultry, & Fish Cutter	Grain/Farm Manager	Food/Animal Science
Logger, Tree Tagger	Forestry and Conservation Technician	Horticulture/Forestry Science
Environmental Sampling Technician	Environmental Monitoring	Environmental Management Systems

CAPSTONE CREDENTIALS

In order to graduate, Jump Start students must earn at least one credential from the options below.

Regional (Emerging)	Basic	Advanced
Career and Technical Certificate (LCTCS)*	Certificate of Technical Studies (LCTCS)*	Technical Diploma (LCTCS)*
Agricultural Career Development	Agriculture Mechanics	Forestry (Louisiana Forestry Association)
Agricultural Leadership Development	Ducks Unlimited Ecology Conservation and Management Certification	Water Production Operator I, Water Treatment Operator I, AND Water Distribution Operator I
BASF Plant Science Certification	FAA Part 107: Small Unmanned Aircraft Operations	
Meat Processing	Four Stroke Engine Technician	
	Geographic Information System - Entry Level Technician Certification	
	Louisiana Agritechnology	
	(Louisiana Farm Bureau Federation)	
	Louisiana Department of Health,	
	Office of Public Health-Engineering Services:	
	 Water Production Operator I • Water Treatment 	
	Operator I · Water Distribution Operator I	

*Aligned to pathway.

Course Code	Max Credits	Min Credits	Course Name	Actions
100303	1	1	ADVANCED NUTRITION AND FOOD (1 CREDIT)	
100301	0.5	0.5	ADVANCED NUTRITION AND FOOD (1/2 CREDIT)	
110590	1	0.5	ADVANCED TECHNICAL DRAFTING	
110830	1	0.5	AEROSPACE ENGINEERING (1 CREDIT)	
010444	1	0.5	AG CONST. TECH (1 CREDIT)	
010364	1	0.5	AG LEADERSHIP (1 CREDIT)	
010446	1	0.5	AG POWER EQUIPMENT (1 CREDIT)	
010443	1	0.5	AGRIBUSINESS (1 CREDIT)	
010343	0.5	0.5	AGRIBUSINESS (1/2 CREDIT)	
010501	1		AGRICULTURAL EDUCATION ELECTIVE I (1 CREDIT)	
010500	0.5		AGRICULTURAL EDUCATION ELECTIVE I (1/2 CREDIT)	
010502	2		AGRICULTURAL EDUCATION ELECTIVE I (2 CREDITS)	
010503	3		AGRICULTURAL EDUCATION ELECTIVE I (3 CREDITS)	
010511	1		AGRICULTURAL EDUCATION ELECTIVE II (1 CREDIT)	
010510	0.5		AGRICULTURAL EDUCATION ELECTIVE II (1/2 CREDIT)	
010512	2		AGRICULTURAL EDUCATION ELECTIVE II (2 CREDITS)	
010512	3		AGRICULTURAL EDUCATION ELECTIVE II (3 CREDITS)	
010404	3		AGRISCIENCE ELECT I (3 CREDITS)	
010404	1		AGRISCIENCE ELECT II (1 CREDIT)	
010412	0.5		AGRISCIENCE ELECT II (1/2 CREDITS)	
010411	2		AGRISCIENCE ELECT II (1/2 CREDITS)	
010413	3		AGRISCIENCE ELECT II (2 CREDITS)	
010414	1		AGRISCIENCE ELECTIVE	
010402	0.5			
			AGRISCIENCE ELECTIVE I (1/2 CREDIT)	
010403	1	1	AGRISCIENCE ELECTIVE I (2 CREDITS) AGRISCIENCE I	Remove 2023 - Universal Course List
010302	1	0.5	AGRISCIENCE II	
010303	1		AGRISCIENCE III	
010304	1		AGRISCIENCE IV	
010344	0.5		AGRISCIENCE-CONSTRUCTION (1/2 CREDIT)	
010354	0.5		AGRISCIENCE-LEADERSHIP DEVELOPMENT (1/2 CREDIT)	
010347	0.5		ANIMAL SCIENCE (1/2 CREDIT)	
220310	1		AP HUMAN GEOGRAPHY	
313100	1		AWS WELDING I (1 credit)	
313099	0.5		AWS WELDING I (1/2 CREDIT)	
313102	2		AWS WELDING I (2 credits)	
313103	3		AWS WELDING I (3 credits)	
313105	1		AWS WELDING II (1 credit)	
313106	2		AWS WELDING II (2 credits)	
313107	3		AWS WELDING II (3 credits)	
310400	ى 1		BASIC ELECTRICITY I (1 CREDIT)	
	1			
310402	2		BASIC ELECTRICITY I (2 CREDITS)	
310403	3		BASIC ELECTRICITY I (3 CREDITS)	
110560	1		BASIC TECHNICAL DRAFTING	
010356	1		BIOTECHNOLOGY in AGRISCIENCE (1 credit)	
040307	1		Business Math	
010380	0.5		CANINE CARE & TRAINING (1/2 CREDIT)	
010331	1		CAREER READINESS AGRISCIENCE AGRIBUSINESS NATURAL RESOURCES	
310600	1		CARPENTRY I (1 CREDIT)	
310602	2	2	CARPENTRY I (2 CREDITS)	

Course Code	Max Credits	Min Credits	Course Name	Actions
310603	3	1.5	CARPENTRY I (3 CREDITS)	
310605	1		CARPENTRY II (1 CREDIT)	
310612	2		CARPENTRY II (2 CREDITS)	
310613	3		CARPENTRY II (3 CREDITS)	
010475	1		CASE (CURRICULUM for AGRI and SC ED) ANIMAL SCIENCE (1 CR)	
010474	1		CASE (CURRICULUM for AGRI and SC ED) PLANT SCIENCE (1 CR)	
010332	1		CASE: FOOD SCIENCE AND SAFETY	
010333	1		CASE: INTRODUCTION TO AGRISCIENCE, FOOD, & NATURAL RESOURCES	
080058	3		CDF-Qualifying Pre-Apprenticeship I: CITF Millwright	Added 2024 -2025
080058	3		CDF-Qualifying Pre-Apprenticeship I: CITF Millwright	Added 2024 -2025
080054	3		CDF-Qualifying Pre-Apprenticeship I: CITF Welding	Added 2024 -2025
080054	3		CDF-Qualifying Pre-Apprenticeship I: CITF Welding	Added 2024 -2025
080051	3		CDF-Qualifying Pre-Apprenticeship II: CITF Carpentry	Added 2024 -2025
080051	3		CDF-Qualifying Pre-Apprenticeship II: CITF Carpentry	Added 2024 -2025
080055	3		CDF-Qualifying Pre-Apprenticeship II: CITF Welding	Added 2024 -2025
080055	3		CDF-Qualifying Pre-Apprenticeship II: CITF Welding	Added 2024 -2025
150401	1		CHEMISTRY	Added 2024 -2020
150401	1		Chemistry I: DE - CCEM 1013 General Chemistry Survey I	Added 2024 -2025
150414	1		Chemistry I: DE - CCEM 1013 General Chemistry Survey I	Added 2024 -2025
150414	1		Chemistry I: DE - CCEM 1123 Chemistry I (Sci Majors)	Added 2024 -2025 Added 2024 -2025
150413	1		Chemistry I: Gifted	Added 2024 -2025 Added 2024 -2025
150412	1		Chemistry I: Honors	
110570			-	Added 2024 -2025
	1		CMAD Drafting	
110571	2		CMAD Drafting (2 credit)	
110572	3		CMAD Drafting (3 credit)	
312095	1		Comparative Anatomy and Physiology (LSU Partnership)	
040220	1		COMPUTER TECHNOLOGY LITERACY	
010323	3		COOPERATIVE AGRISCIENCE EDUCATION I (3 CREDITS)	
010325	3		COOPERATIVE AGRISCIENCE EDUCATION II (3 CREDITS)	
080800	1		DIGITAL MEDIA I (1 CREDIT)	
080802	2		DIGITAL MEDIA I (2 CREDITS)	
080803	3		DIGITAL MEDIA I (3 CREDITS)	
010430	1		ENVIRON STUDIES in AGRISCIENCE (1 CREDIT)	
150310	1		ENVIRONMENTAL SCIENCE	
150311	1		Environmental Science: AP Environmental Science	
150914	1	0.5	Environmental Science: DE - CEVS 1103 Environmental Science	
150913	1	0.5	Environmental Science: Gifted	Added 2024 -2025
150328	1	0.5	Environmental Science: Honors	Added 2024 -2025
010359	1	0.5	EQUINE SCIENCE (1 CREDIT)	
010349	0.5	0.5	EQUINE SCIENCE (1/2 CREDIT)	
010460	1	0.5	FLORISTRY (1 CREDIT)	
155040	1	0.5	FOOD SCIENCE	
010361	1	1	FORESTRY (1 CREDIT)	
010351	0.5		FORESTRY (1/2 CREDIT)	
310631	1		Fundamentals of Industrial Scaffolding (1 Credit)	
310632	2		Fundamentals of Industrial Scaffolding (2 Credits)	
110010			GENERAL TECHNOLOGY EDUCATION	Remove 2023 - Universal Course List
010103	1	0.5	GIS Entry Level 1	
010104	1		GIS Entry Level 2	
010452	1		HORTICULTURE (1 CREDIT)	

Course Code	Max Credits	Min Credits	Course Name	Actions
010352	0.5	0.5	HORTICULTURE I (1/2 CREDIT)	
090811	1	0.5	Intro to Biomedical Sciences (LSU Partnership)	
061141	1	0.5	Intro to Computational Thinking	
061140	1	0.5	INTRO TO COMPUTATIONAL THINKING FOR STEM (LSU PARTNERSHIP)	
312092	1	0.5	Intro to History of Water Management	
110801	1	0.5	INTRODUCTION TO ENGINEERING DESIGN (LSU PARTNERSHIP)	
311922	1	0.5	Introduction to Hazardous Materials	
110795	1	0.5	Introduction to Remote Controlled Vehicle Technologies	
080818	1	0.5	Introduction to Social Media	
312090	1	0.5	Louisiana Wetlands Ecology	
010330	1		MEAT PROCESSING (1 CREDIT)	
010601	1		NCCER CARPENTRY IN AGRISCIENCE (1 CREDIT)	
010602	2		NCCER CARPENTRY IN AGRISCIENCE (2 CREDITS)	
010603	3		NCCER CARPENTRY IN AGRISCIENCE (3 CREDITS)	
010604	1		NCCER Carpentry in Agriscience II (1 credit)	
010605	2		NCCER Carpentry in Agriscience II (2 credit)	
010606	3		NCCER Carpentry in Agriscience II (3 credit)	
010701	1		NCCER ELECTRICAL IN AGRISCIENCE (1 CREDIT)	
010702	2		NCCER ELECTRICAL IN AGRISCIENCE (2 CREDITS)	
010703	3		NCCER ELECTRICAL IN AGRISCIENCE (3 CREDITS)	
010704	1		NCCER Electrical in Agriscience II (1CR)	
010705	1		NCCER Electrical in Agriscience II (2CR)	
010706	1		NCCER Electrical in Agriscience II (3CR)	
010801	1		NCCER PIPEFITTING IN AGRISCIENCE (1 CREDIT)	
010802	2		NCCER PIPEFITTING IN AGRISCIENCE (2 CREDITS)	
010803	3		NCCER PIPEFITTING IN AGRISCIENCE (3 CREDITS)	
010803	1		NCCER Pipefitting in Agriscience II (1 credit)	
010805	2		NCCER Pipefitting in Agriscience II (2 credit)	
010806	3		NCCER Pipefitting in Agriscience II (3 credit)	
010901	1		NCCER WELDING IN AGRISCIENCE (1 CREDIT)	
010901	2		NCCER WELDING IN AGRISCIENCE (1 CREDIT)	
010902	3		NCCER WELDING IN AGRISCIENCE (2 CREDITS)	
010903	1		NCCER Welding in Agriscience (3 CREDITS) NCCER Welding in Agriscience II (1 credit)	
010904	2		NCCER Welding in Agriscience II (2 credits)	
010905	3		NCCER Welding in Agriscience II (2 credits)	
313700	ى 1		NCCER WELDING TECHNOLOGY I (1 CREDIT)	
110741	1		NCCER WELDING TECHNOLOGY I (1 CREDIT)	
110741	2		NCCER WELDING TECHNOLOGY I (2 CREDITS)	
313702			· · · · ·	
110743	2		NCCER WELDING TECHNOLOGY I (2 CREDITS)	
			NCCER WELDING TECHNOLOGY I (3 CREDITS)	
313703	3		NCCER WELDING TECHNOLOGY I (3 CREDITS)	
110746	- 1		NCCER WELDING TECHNOLOGY II (1 CREDIT)	
313705	1		NCCER WELDING TECHNOLOGY II (1/2 CREDIT)	
313628	0.5		NCCER WELDING TECHNOLOGY II (1/2 CREDIT)	
110747	2		NCCER WELDING TECHNOLOGY II (2 CREDITS)	
313712	2		NCCER WELDING TECHNOLOGY II (2 CREDITS)	
110748	3		NCCER WELDING TECHNOLOGY II (3 CREDITS)	
313713	3		NCCER WELDING TECHNOLOGY II (3 CREDITS)	
100302	1		NUTRITION AND FOOD (1/2 OPERIT)	
100300	0.5		NUTRITION AND FOOD (1/2 CREDIT)	
312300	1	0.5	OUTDOOR POWER EQUIPMENT TECHNICIAN I (1 CREDIT)	

Course Code	Max Credits	Min Credits	Course Name	Actions
312302	2	2	OUTDOOR POWER EQUIPMENT TECHNICIAN I (2 CREDITS)	
312303	3	1.5	OUTDOOR POWER EQUIPMENT TECHNICIAN I (3 CREDITS)	
312305	1	0.5	OUTDOOR POWER EQUIPMENT TECHNICIAN II (1 CREDIT)	
312312	2	2	OUTDOOR POWER EQUIPMENT TECHNICIAN II (2 CREDITS)	
312313	3	1.5	OUTDOOR POWER EQUIPMENT TECHNICIAN II (3 CREDITS)	
312320	1	0.5	OUTDOOR POWER EQUIPMENT TECHNICIAN III (1 CREDIT)	
312321	2	2	OUTDOOR POWER EQUIPMENT TECHNICIAN III (2 CREDITS)	
312322	3	1.5	OUTDOOR POWER EQUIPMENT TECHNICIAN III (3 CREDITS)	
312330	1	0.5	OUTDOOR POWER EQUIPMENT TECHNICIAN IV (1 CREDIT)	
312331	2	2	OUTDOOR POWER EQUIPMENT TECHNICIAN IV (2 CREDITS)	
312332	3	1.5	OUTDOOR POWER EQUIPMENT TECHNICIAN IV (3 CREDITS)	
312098	1	0.5	PLTW Environmental Sustainability	
080109	1	0.5	PLTW Principles of Engineering	
110330	1	0.5	POWER MECHANICS	
080210	1	0.5	PRE-APPRENTICESHIP I (1 CREDIT)	
080208	2	2	Pre-Apprenticeship I (2 Credits)	
080211	1	0.5	Pre-Apprenticeship II (1 Credit)	
080209	2	2	PRE-APPRENTICESHIP II (2 CREDITS)	
110810	1	0.5	PRINCIPLES OF ENGINEERING (1 CREDIT)	
110811	2	2	PRINCIPLES OF ENGINEERING (2 CREDITS)	
110864	1	0.5	PRINCIPLES OF ENGINEERING (LSU PARTNERSHIP)	
110796	1	0.5	Remote Controlled Vehicle Technologies (1 credit)	Added 2024 -2025
010375	1	0.5	SMALL ANIMAL CARE & MANAGEMENT (1 CREDIT)	
010365	0.5	0.5	SMALL ANIMAL CARE AND MANAGEMENT (1/2 CREDIT)	
010346	0.5	0.5	SMALL ENGINES (APPLICATIONS) (1/2 CREDIT)	
010390	1	0.5	VETERINARY ASSISTANT (1 CREDIT)	
010391	1	0.5	VETERINARY ASSISTANT II (1 CREDIT)	
110502	1	0.5	Water Distribution Operator DCC	
110500	1	0.5	Water Production Operator DCC	
110501	1	0.5	Water Treatment Operator DCC	