CATALOG 2025-2026

REND LAKE COLLEGE

This publication includes changes and corrections to the 2025-2026 Rend Lake College Catalog.

ADDENDUM

ADMINISTRATIVE CHANGES

Page 23: Change to Fines and Financial Obligations Policy

FINES AND FINANCIAL OBLIGATIONS

Students who have past-due financial obligations to Rend Lake College, including but not limited to library fines or charges, ~~will~~ **may** not be permitted to register for classes until satisfactory arrangements have been made to meet those obligations.

COURSE CHANGES

Page 158: Change to credit hours for MATH 1111 (Effective 5/31/2025)

MATH 1111 – Statistics ~~(4)~~ (3)

Prerequisite: ~~Qualifying placement scores~~ MATH 1403, 1407, or 1409 with a "C" or better

A course recommended for students in such areas as math, science, economics, education and business. Topics include the language and process of statistics; descriptive methods using quantitative, qualitative and bivariate data; linear correlation and regression; fundamentals of probability; probability distributions, including binomial, normal and chi-square distribution; confidence intervals; and hypothesis testing using P-values and statistical software. ~~Tradition and online format.~~ Lecture ~~4~~ 3 hours. **IAI ~ M1 902**

Updates to Prerequisites and Course Equivalencies to Welding Courses (Effective 1/1/25)

WELD 1202 – Structural Shielded Metal Arc Welding (SMAW) (1)

Prerequisite: WELD 1201 or WELD 1270

This course is designed to give the student an overview of the shielded metal arc welding processes used in general industry, construction, and fabrication industries. In addition, concentrated instruction in the use of different welding electrodes, electrode identification, electrode storage and basic welding symbols will be provided. Practical applications of AC/DC theory in the area of fillet joints in th vertical up and overhead positions will be included. Lecture 0.5 hours. Lab 1 hours.

WELD 1203 – Gas Metal Arc Welding (GMAW) (1)

Prerequisite: WELD 1201 or WELD 1270

This course is designed to give the student an overview of Gas Metal and Gas Tungsten Arc Welding processes used in general industry, construction, and fabrication industries with a concentration in auto body and production manufacturing processes where light gauge metals are used. The ability of GMAW and GTAW processes to seld nonferrous materials with high quality results will be stressed. Lecture 0.5 hours. Lab 1 hours.

WELD 1204 – Gas Tungsten Arc Welding (Gtaw) (1)

Prerequisite: WELD 1201 or WELD 1270

This course provides the student with a thorough knowledge of gas tungsten arc welding fundamentals, arc characteristics and welding safety. The course will include lecture and lab activities on the welding characteristics of carbon steel, stainless steel and aluminum. Lecture 0.5 hours. Lab 1 hours.

WELD 1205 – SMAW II (1)

~~Prerequisite: WELD 1201 or consent of instructor~~ Prerequisite: WELD 1202

Concentrated instruction in using different welding electrodes, electrode identification, and basic welding symbols. The course provides practical applications of AC/DC theory in fillet welds in the horizontal position. Students will be required to demonstrate course competencies through multiple assessments that simulate AWS code that is expected within the industry. Lecture 0.5 hours. Lab 1 hours.

WELD 1207 – SMAW IV (1)

~~Prerequisite: WELD 1202 or consent of instructor~~ Prerequisite: WELD 1206

Concentrated instruction in using different welding electrodes, electrode identification, and basic welding symbols. The course provides practical applications of AC/DC theory in the area of fillet joints in the overhead position. Students must demonstrate course competencies through multiple assessments that simulate AWS code expected within the industry. Lecture 0.5 hours. Lab 1 hours.

WELD 1270 – Introduction to Welding Processes (4)

Equivalent to WELD 1201, WELD 1202, WELD 1203, and WELD 1204

This course is designed to give the student an overview of the various metal-joining processes used in general industry, construction and fabrication industries. Processes include shielded metal arc welding, gas metal arc welding, oxy-acetylene welding and brazing and gas tungsten arc welding. Lecture 2 hours. Lab 4 hours.

WELD 1272 – Structural Shielded Metal Arc Welding (4)

Prerequisite: WELD 1270 or concurrent enrollment

Equivalent to WELD 1205, WELD 1206, WELD 1207, and WELD 1208

Concentrated instruction in the use of different welding electrodes, electrode identification, electrode storage and basic welding symbols. The course provides practical applications of AC/DC theory in the area of fillet joints in the vertical up and overhead positions. Lecture 2 hours. Lab 4 hours.

WELD 2275 – Advanced Shielded Metal Arc Welding (2)

~~Prerequisite: WELD 1272 or consent of the instructor~~ Prerequisite: WELD 1272 or WELD 1208

This course is designed to familiarize the student with welding procedures as stipulated by American Welding Society (AWS) D1.1 structural code for qualifications, testing and standards. Lecture .5 hour. Lab 3 hours.

WELD 1282 – GMAW / GTAW Welding (4)

Equivalent to WELD 1209, WELD 1210, WELD 1211, and WELD 1212

Introduces Gas Metal and Gas Tungsten Arc Welding for use in auto body and production manufacturing processes where light gauge metals are used. The ability of GMAW and GTAW processes to weld nonferrous materials with high quality results will be stressed. Lecture 2 hours. Lab 4 hours.

CSCI Courses Withdrawn (Effective 8/1/25)

~~CSCI 1261 – Mastering .NET Platform Fundamentals (3)~~

~~Prerequisite: CSCI 1260 or consent of instructor~~

~~This course teaches programmers skills necessary to create data-driven applications for Microsoft's .NET platform. Lecture 3 hours.~~

~~CSCI 1262 – Advanced .NET Platform Development (3)~~

~~Prerequisite: CSCI 1261 or consent of instructor~~

~~This course teaches programmers how to create database applications on Microsoft's .NET platform. Lecture 3 hours.~~

~~CSCI 1264 – Mastering Web Application Development (3)~~

~~Prerequisite: CSCI 1260 and WBM 1220~~

~~This course teaches the skills necessary to create data-driven, connected web applications using Microsoft's .NET platform at the server. Lecture 3 hours.~~

~~IST 2258 – Automated Pneumatic Machine Control (4)~~

~~Prerequisites: INEL 1291, FLPR 1262, IST 2230 or consent of instructor~~

~~This course is designed to acquaint students with the control of automated industrial machinery, including robots. Emphasis will be placed on electrical, electronic and pneumatic control systems, ladder diagramming and troubleshooting experiences. Lecture 2 hours. Lab 4 hours.~~

NEW COURSES

(New Nursing Course Effective 1/1/2025)

NURS 2202 NCLEX-RN Prep Course (2)

A nursing alumnus who graduates from Rend Lake College's Associate Degree in Nursing Program and the graduate has not taken the NCLEX-RN in 180 days after the degree was conferred by the institution or has failed the NCLEX-RN for a second time is offered the prep course.

This NCLEX-RN prep course is a comprehensive review of the nursing content covered in Rend Lake College's Associate Degree in Nursing Program needed to take the NCLEX-RN. This course reviews knowledge, skills, concepts, and attitudes essential for the safe and effective nursing practice at entry level for the registered nurse Lecture 2 hours.

(New Renewable Energy Courses Effective 8/1/2025)

RNEW 1200 Intro To Renewable Energy Systems (3)

This course focuses mainly on renewable energy, but also addresses nonrenewable energy (fossil fuels and nuclear technology). It covers the basic physics of renewable energy, conservation, economic, and public policy issues, with an emphasis on explaining how things work in practice. It also addresses fundamental analytical skills with wide application. Lecture 3 hours.

RNEW1201 Commercial Load Cale & Energy Audits (3)

This course covers the information needed to perform commercial building energy audits and managing energy usage. Topics include energy bills, life cycle costing, electrical distribution systems, boilers, steam distribution systems, control systems and computers, energy systems maintenance, insulation, compressed air, renewable energy sources and water management, distributed generation, and green buildings. Lecture 3 hours.

RNEW 1202 PV Alternative Energy Generation (3)

This course will cover the installation and maintenance of solar photovoltaic (PV) systems commonly used such as AC, DC, and grid-tie. Inverters, charge controllers, system sizing. performance analysis, connection types, troubleshooting, and system level problem solving will be among the topics covered. This course supports the knowledge neeeded for the NABCEP (North American Board of Certified Energey Practitioners) test for certified PV system installers. Lecture 2 hours. Lab 2 hours.

RNEW1203 PV Installations and Standards (3)

This course is designed to introduce students to wiring, installation, protection, and connection requirements of photovoltaic systems (PV) as it pertains to the National Electric Code. Both small scale (single dwelling) and large scale systems will be examined. Lecture 3 hours.

PROGRAM CHANGES

(Marketing Specialist Occupational Certificate Change
Added GRD 1220 option
Effective 6/10/2025)

VISUAL COMMUNICATION DESIGN

MARKETING SPECIALIST

Occupational Certificate

APPLIED SCIENCE & TECHNOLOGY DIVISION

The Marketing Specialist certificate prepares students for an entry-level career in marketing for business and industry- helping companies figure out what sells, what people are buying, and what type of people are buying what products. The curriculum also provides individuals with skills to create graphics to illustrate important information and translate complex findings and materials into easy-to-understand graphic solutions, brainstorm with team members for creative promotional campaigns and advertising while using appropriate channels and media outlets. ► **Total = 24 Hours**

Fall Semester		**Cr. Hrs.**
GRD 1201	Introduction to Graphic Design	3
GRD 1202	Typography and Color Theory	3
GRD 2201	Adobe Essentials I	3
MRKT 2201	Principles of Marketing	3
		12
Spring Semester		
GRD 1203	Advertising Design	3
GRD 1215	Web Page Design	3
GRD 2215	Adobe Essentials II	3
BUSI 2107	Business Communications	3
		12

Stackable into Visual Communication Design AAS and Business AAS.

OLD

VISUAL COMMUNICATION DESIGN

MARKETING SPECIALIST

Occupational Certificate

APPLIED SCIENCE & TECHNOLOGY DIVISION

The Marketing Specialist certificate prepares students for an entry-level career in marketing for business and industry- helping companies figure out what sells, what people are buying, and what type of people are buying what products. The curriculum also provides individuals with skills to create graphics to illustrate important information and translate complex findings and materials into easy-to-understand graphic solutions, brainstorm with team members for creative promotional campaigns and advertising while using appropriate channels and media outlets. ► **Total = 24 Hours**

Fall Semester		**Cr. Hrs.**
GRD 1201	Introduction to Graphic Design	3
GRD 1202	Typography and Color Theory	3
GRD 2201	Adobe Essentials I	3
MRKT 2201	Principles of Marketing	
or GRD 1220	**Advanced Web Design**	**3**
		12
Spring Semester		
GRD 1203	Advertising Design	3
GRD 1215	Web Page Design	3
GRD 2215	Adobe Essentials II	3
BUSI 2107	Business Communications	3
		12

Stackable into Visual Communication Design AAS and Business AAS.

NEW

(Motion Design Occupational Certificate Change
Added ART 1105 option
Effective 6/10/2025)

VISUAL COMMUNICATION DESIGN

MOTION DESIGN

Occupational Certificate

APPLIED SCIENCE & TECHNOLOGY DIVISION

The Motion Design Certificate provides a fundamental knowledge of digital imaging, video, and motion graphics. Students begin with 2D and 3D fundamentals, imaging, and design. Students then study the aesthetic and design aspects of digital media with focused courses in graphic design and advanced imaging. Students explore how to animate in digital video, After Effects, and Adobe Premiere Pro. Motion Design professionals may pursue careers that include video production and post-production, visual effects, advertising, web applications, graphics software, architectural design, 3D modeling and simulation, and scientific research or visualization.

► Total = 30 Hours

	Fall Semester		**Cr. Hrs.**
☐	GRD 1201	Introduction to Graphic Design	3
☐	GRD 1202	Typography and Color Theory	3
☐	GRD 2201	Adobe Essentials I	3
☐	GRD 1205	Drawing for Communications	3
			12

	Spring Semester		**Cr. Hrs.**
☐	GRD 1209	Motion Design I	3
☐	GRD 2215	Adobe Essentials II	3
☐	GRD 1215	Web Design	3
☐	GRD 1203	Advertising Design	3
			12

	Fall Semester		**Cr. Hrs.**
☐	GRD 2205	Motion Design II	3
☐	GRD 2206	Motion Design III	3
			6

OLD

MOTION DESIGN

Occupational Certificate

APPLIED SCIENCE & TECHNOLOGY DIVISION

The Motion Design Certificate provides a fundamental knowledge of digital imaging, video, and motion graphics. Students begin with 2D and 3D fundamentals, imaging, and design. Students then study the aesthetic and design aspects of digital media with focused courses in graphic design and advanced imaging. Students explore how to animate in digital video, After Effects, and Adobe Premiere Pro. Motion Design professionals may pursue careers that include video production and post-production, visual effects, advertising, web applications, graphics software, architectural design, 3D modeling and simulation, and scientific research or visualization.

► Total = 30 Hours

	Fall Semester		**Cr. Hrs.**
☐	GRD 1201	Introduction to Graphic Design	3
☐	GRD 1202	Typography and Color Theory	3
☐	GRD 2201	Adobe Essentials I	3
☐	GRD 1205	Drawing for Communications	
	or ART 1105	**Drawing I**	**3**
			12

	Spring Semester		**Cr. Hrs.**
☐	GRD 1209	Motion Design I	3
☐	GRD 2215	Adobe Essentials II	3
☐	GRD 1215	Web Design	3
☐	GRD 1203	Advertising Design	3
			12

	Fall Semester		**Cr. Hrs.**
☐	GRD 2205	Motion Design II	3
☐	GRD 2206	Motion Design III	3
			6

NEW

AGRICULTURAL TECHNOLOGY

Associate of Applied Science Degree

APPLIED SCIENCE & TECHNOLOGY DIVISION

This program was formed to meet the changing needs of the Agricultural community. Students will gain valuable experience with equipment that is on the cutting edge of the Ag industry (including GPS and machine guidance, Variable Rate Technologies, drones, and autonomous solutions) as well as how this technology works. Agriculture is a quickly evolving field, and the need for trained employees with experience with this equipment is needed now more than ever. Students who complete this program will be well prepared to enter the workforce for equipment dealerships, Ag service providers, seed/fertilizer companies, and many other sectors of the Ag Industry. Students will also have the opportunity to capstone into a 4 year institution after completion. ..... ► **Total = 64 Hours**

	Fall Semester		**Cr. Hrs.**
☐	AGRI 1161	Soil Science	4
☐	AGRI 1285	Agriculture Technologies	3
☐	ENGL 1101	Rhetoric and Composition I	3
☐	CSCI 1102	Intro to Computers w/ Business Applications	3
☐	AGRI 1222	Applied Mathematics	
	or MATH 1108	College Algebra	3
			16

	Spring Semester		**Cr. Hrs.**
☐	AGAT 1202	Circuit Fundamentals & Digital Logic	4
☐	AGRI 1262	Agrcultural Chemicals	3
☐	AGRI 1141	Agriculture Economics	3
☐	COMM 1101	Principles of Effective Speaking	3
☐	AGRI 1210	Supervised Occupational Experience	4
			17

	Fall Semester		**Cr. Hrs.**
☐	AGAT 1203	Auto. Applications in Agriculture	4
☐	AGRI 1214	Intro To Digital Farm Management	3
☐	AGRI 1263	Crop Science	4
☐	AGAT 1201	Ag Tech Software Applications	4
			15

	Spring Semester		**Cr. Hrs.**
☐	AGRI 2207	Farm Data Management & Analytics	3
☐	AOT 1204	Field Calibration of Equipment	2
☐	AOT 1206	Applicator Equipment Operations	3
	Elective	General Education	3
☐	AOT 1203	Field Computer Systems	2
☐	AOT 1202	Ag Retail Sales	3
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Recommended General Education Courses (Choose One)

☐	BOT 1101	Plants and Society	3
☐	CHE 1101	General Chemistry I	3
☐	ENGL 1102	Rhetoric and Composition II	3
☐	HIST 2101	American History I	3
☐	PHSC 1102	Principles of Earth Science	3
☐	POLI 2101	American Government	3
☐	SOCI 1101	Introduction to Sociology	3