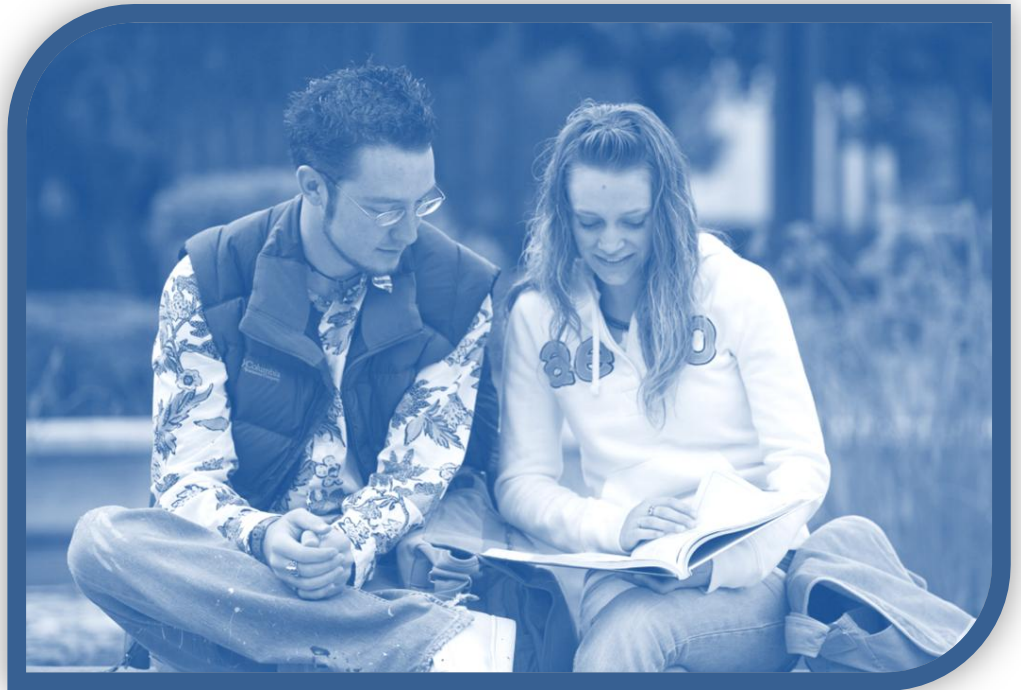




This addendum contains programs and courses that were approved and corrections made after the 2009-2010 catalog was published.

*Last updated on
09/10/2009*



About the Addendum

The contents of this addendum supersede the content specified in the 2009-2010 catalog where noted. Contents of the 2009-2010 catalog not revised in this addendum remain in effect. The unrevised content of the 2009-2010 catalog and the revised content of this addendum are valid for the 2009-2010 academic year. The College of Southern Idaho reserves the right to change, without notice, any materials, information, curriculum, requirements, and regulations published in this catalog addendum.

Expanded Programs

CULINARY ARTS

Postsecondary Certificate

Major Code: 4202V

Contact: Mike Johnson
 (208) 732-6381
mjohnson@csi.edu

Susan Ettesvold
 (208) 732-6381
settesvold@csi.edu

	Course	Course Title	Cr Hrs
Required Courses			
	CULA 150	Food Sanitation	3
Complete one of the following emphasis areas below:			
<i>Culinary Emphasis:</i>			
	CULA 110	The Professional Kitchen	6
	CULA 120	Introduction to Food Preparation*	6
<i>Baking & Pastry Emphasis:</i>			
	BAKE 110	Professional Baking & Pastry I	6
	BAKE 120	Professional Baking & Pastry II*	6
Total Credit Hours Required for this Major:			15

**Prerequisite or co-requisite required*

CULINARY ARTS

Technical Certificate

Major Code: 4202T

Contact: Mike Johnson
 (208) 732-6381
mjohnson@csi.edu

Susan Ettesvold
 (208) 732-6381
settesvold@csi.edu

Required Courses	Course	Course Title	Cr Hrs
	COMM 101	Fundamentals of Oral Communication	3
	<u>or</u> ENGL 101	English Composition	3
	MATH GE	Any Gen. Ed. Math Course	3
	SOCS GE	Any Gen. Ed Soc. Science Course	3
	CULA 150	Food Sanitation	3
	CULA 160	Menu Management	3
	<u>or</u> CULA 180	Food Service Purchasing	3
	HOSM 174	Customer Service & Conflict Resolution	2

Complete one of the following emphasis areas below:

Culinary Emphasis:

CULA 110	The Professional Kitchen	6
CULA 120	Introduction to Food Preparation*	6

Baking & Pastry Emphasis:

BAKE 110	Professional Baking & Pastry I	6
BAKE 120	Professional Baking & Pastry II*	6

Total Credit Hours Required for this Major: 29

**Prerequisite or co-requisite required.*

Culinary students please note that the baking option is an expansion of the culinary program found on page 65 of the 2009-2010 CSI Catalog.

New Programs

ENVIRONMENTAL TECHNOLOGY

Associate of Applied Science

Major Code: 4120A

Contact: Ross Spackman
(208) 732-6405
rspackman@csi.edu

Required Courses	Course	Course Title	Cr Hrs
	COMM 101	Fundamentals of Oral Communication	3
	ENGL 101	English Composition 1*	3
	MATH 143	College Algebra*	3
	SOCS GE	Any Gen Ed Soc. Science Course	3
	PHYS 100	Survey of Physics	4
	CISA 101	Computer Literacy Skill Development	3
	ENVT 105	Introduction to Renewable Energy	3
	ENVT 123	Environmental Technology Internship	3
	ENVT 145	Alternative Electricity Production	3
	ENVT 155	Biofuels	3
	INDM 101	Industrial Safety*	1
	INDM 105	Industrial Tools and Equipment	1
	INDM 110	Fundamentals of Electricity/Electronics*	2
	INDM 112	AC Electrical Circuits 1*	1
	INDM 114	DC Electrical Circuits 1*	1
	INDM 141	Mechanical Drive Systems	2
	INDM 151	Fluid Power and Hydraulics	2
	INDM 161	Electrical Motors and Generators	2
	WATR 120	Water Quality	3
	WATR 130	Water Physics	3
	WIND 101	Introduction to Wind Energy	3
	ELEC ANY	Electives: Bring Total to 64 Credits	12
	Total Credit Hours Required for this Major:		64

**Prerequisite or corequisite required.*

Completion of computer literacy test required.

ENVIRONMENTAL TECHNOLOGY

Technical Certificate

Major Code: 4120T

Contact: Ross Spackman, (208) 732-6405
rspackman@csi.edu

Course	Course Title	Cr Hrs
Required Courses		
ENGL 101	English Composition 1*	3
MATH GEN ED	Any Gen Ed Math Course*	3
SOCS GE	Any Gen Ed Soc. Science Course	3
CISA 101	Computer Literacy Skill Development	3
ENVT 105	Introduction to Renewable Energy	3
ENVT 145	Alternative Electricity Production	3
ENVT 155	Biofuels	3
INDM 101	Industrial Safety*	1
INDM 105	Industrial Tools and Equipment	1
INDM 110	Fundamentals of Electricity/Electronics*	2
INDM 112	AC Electrical Circuits 1*	1
INDM 114	DC Electrical Circuits 1*	1
INDM 141	Mechanical Drive Systems	2
INDM 151	Fluid Power and Hydraulics	2
INDM 161	Electrical Motors and Generators*	2
Total Credit Hours Required for this Major:		33

**Prerequisite or co-requisite required.*

Completion of computer literacy test required.

INDUSTRIAL MECHANICS TECHNOLOGY

Technical Certificate

Major Code: 4585T

**Contact: Darrell Buffaloe, (208) 732-6394
dbuffaloe@csi.edu**

Course	Course Title	Cr Hrs
Required Courses		
ENGL 101	English Composition 1*	3
MATH GE	Any Gen Ed Math Course*	3
SOCS GE	Any Gen Ed Soc. Science Course	3
CISA 101	Computer Literacy Skills Development	3
INDM 101	Industrial Safety*	1
INDM 105	Industrial Tools and Equipment	1
INDM 110	Fundamentals of Electricity/Electronics*	2
INDM 112	AC Electrical Circuits 1*	1
INDM 114	DC Electrical Circuits 1*	1
INDM 135	Industrial Rigging & Crane Operations	1
INDM 141	Mechanical Drive Systems	2
INDM 151	Fluid Power and Hydraulics	2
INDM 161	Electrical Motors and Generators*	2
INDM 165	Electrical Motor Controls	2
INDM 178	Preventative Maintenance & Repair	3
or INDM 180	Industrial Fabrication	3
PHYE 150	First Aid & CPR	2
Total Credit Hours Required for this Major:		32

**Prerequisite or co-requisite required.*

Completion of computer literacy test required.

WIND ENERGY TECHNICIAN

Associate of Applied Science

Major Code: 4119A

Contact: Mark Goodman, (208) 732-6325
mgoodman@csi.edu

Required Courses	Course	Course Title	Cr Hrs
	COMM 101	Fundamentals of Oral Communication	3
	ENGL 101	English Composition 1*	3
	MATH 143	College Algebra*	3
	SOCS GE	Any Gen Ed Soc. Science Course	3
	PHYS 100	Survey of Physics	4
	CISS 104	Introduction to Networking	1
	INDM 101	Industrial Safety	1
	INDM 105	Industrial Tools and Equipment	1
	INDM 110	Fundamentals of Electricity/Electronics*	2
	INDM 112	AC Electrical Circuits 1*	1
	INDM 114	DC Electrical Circuits 1*	1
	INDM 135	Industrial Rigging & Crane Operations	1
	INDM 141	Mechanical Drive Systems	2
	INDM 151	Fluid Power and Hydraulics	2
	INDM 161	Electrical Motors and Generators	2
	INDM 165	Electrical Motor Controls	2
	INDM 212	AC Electrical Systems*	4
	INDM 214	AC Electrical Motor Applications*	2
	INDM 216	Electrical Schematics	1
	INDM 224	Industrial Electricity	2
	INDM 250	Programmable Logic Controllers 1	2
	INDM 260	Programmable Logic Controllers 2*	2
	INDM 270	Data Acquisition and Circuits	2
	PHYE 150	First Aid & CPR	2
	WIND 101	Introduction to Wind Energy	3
	WIND 105	Wind Turbine/Tower Safety*	1
	WIND 123	Wind Energy Internship	6
	WIND 155	Wind Turbine Mechanical Systems	2
	WIND 160	Wind Turbine Tower Systems	1

WIND 201	Air Foils and Blades	2
WIND 260	Power Generation, Trans & Dist	3
Total Credit Hours Required for this Major:		67
<i>*Prerequisite or co-requisite required.</i>		
<i>Completion of computer literacy test required.</i>		

WIND ENERGY TECHNICIAN

Technical Certificate

Major Code: 4119T

Contact: Mark Goodman, (208) 732-6325
mgoodman@csi.edu

Required Courses	Course	Course Title	Cr Hrs
	COMM 101	Fundamentals of Oral Communication	3
	or ENGL 101	English Composition 1*	3
	MATH GE	Any Gen. Ed. Math Course	3
	SOCS GE	Any Gen Ed Soc. Science Course	3
	INDM 101	Industrial Safety	1
	INDM 105	Industrial Tools and Equipment	1
	INDM 110	Fundamentals of Electricity/Electronics*	2
	INDM 112	AC Electrical Circuits 1*	1
	INDM 114	DC Electrical Circuits 1*	1
	INDM 135	Industrial Rigging & Crane Operations	1
	INDM 141	Mechanical Drive Systems	2
	INDM 151	Fluid Power and Hydraulics	2
	INDM 161	Electrical Motors and Generators	2
	INDM 165	Electrical Motor Controls	2
	PHYE 150	First Aid & CPR	2
	WIND 101	Introduction to Wind Energy	3
	WIND 105	Wind Turbine/Tower Safety*	1
	WIND 155	Wind Turbine Mechanical Systems	2
	WIND 160	Wind Turbine Tower Systems	1
	Total Credit Hours Required for this Major:		33

**Prerequisite or co-requisite required.*

New Courses

BAKE 110 Professional Baking & Pastry I**6 Cr Hrs**

This course introduces students to the world of professional scratch baking. Students will learn about the tools and equipment used in the bakeshop as well as ingredients and their functions in baking and pastry. Students will also learn the principles of baking and pastry including, scaling (weighing) of ingredients, mixing methods, the baking process and flavor. Students will learn the theory behind professional bakeshop production and have many opportunities for hands-on practice in CSI's open-to-the-public café. Students are encouraged to gain employment over the summer in a working bakery or pastry shop.

BAKE 120 Professional Baking & Pastry II**6 Cr Hrs**

In this course, students will continue to build on the foundation of the first semester. Students will have more hands-on practice with products such as quick breads, yeast breads, cookies, brownies, pies, tarts, cakes, icings, custards, creams, dessert sauces, tortes, ice cream, basic decorative work restaurant dessert plating and an introduction to healthful baking. Prerequisite: BAKE 110.

INDM 101 Industrial Safety**1 Cr Hr**

Industrial Safety instructs students in the importance and application of safe industrial practices and OSHA compliance. Prerequisite: C or better in MATH 025 or COMPASS placement.

INDM 105 Industrial Tools and Equipment**1 Cr Hr**

Students will learn to identify and safely use wrenches, mallets, hammers, tap and die, meters, gauges, gear pullers, pliers, grinders, drills, cutting tools, welders, and light machining equipment.

INDM 110 Fundamentals of Electricity/Electronics**2 Cr Hrs**

Students will be exposed to many facets of electrical energy. This course will cover basic electrical circuit information such as voltage, current, resistance, series circuits, parallel circuits, combination circuits, conductors, insulators, electrical power, sources of electrical energy, magnetism, meters, AC/DC current, and other relevant topics. Prerequisite: C or better in Math 025 or placement; co-requisite: INDM 112 and INDM 114.

INDM 112 AC Electrical Circuits I**1 Cr Hr**

This course introduces the student to alternating current electricity, its behavior in AC circuits. Students will learn about reactance and impedance, AC circuit analysis, resonance and tuned circuits, mutual inductance and transformers. Corequisite: INDM 110 and INDM 114.

INDM 114 DC Electrical Circuits I**1 Cr Hr**

This course introduces the student to direct current electricity and its behavior in DC circuits. Students will learn about resistance, DC power and energy, DC voltage and current laws, DC circuit analysis, DC circuit calculations and interpretation. Corequisite: INDM 110 and INDM 112.

INDM 135 Industrial Rigging and Crane Operations**1 Cr Hr**

Students will learn to safely secure, move, and place heavy objects. Crane hand signals, forklift operation, rigging hardware, jacks, and safety are examples of relevant course topics.

INDM 141 Mechanical Drive Systems**2 Cr Hrs**

Students will learn fundamentals of mechanical drive systems including centrifugal pumps, rotary pumps, and reciprocating pumps. Valves and controls will be discussed.

INDM 151 Fluid Power and Hydraulics**2 Cr Hrs**

Hydraulics is a study dealing with the mechanical properties of liquids. Hydraulic topics cover concepts such as hydraulic pumps, actuators, accumulators, cylinders, control valves, check valves, flow control valves, directional control valves, pressure control valves, motors, filters, coolers, and reservoirs

INDM 161 Electrical Motors and Generators**2 Cr Hrs**

This course is an introduction to the terminology and basic principles of Direct Current and Alternating Current motors and generators. Students will be exposed to not only single phase but three phase motors and generators as well as the controls that allow operation. College Algebra skill level strongly recommended.

INDM 165 Electrical Motors Controls**2 Cr Hrs**

Students will explore the basic principles of electric motor control (both manual and magnetic), principles of ladder logic, standard control circuits such as start/stop and forward/reverse, as well as troubleshooting techniques. Topics include manual motor starters, control transformers, magnetic motor starters, overload protection, reversing techniques, timer relays, and automatic input devices. College Algebra skill level strongly recommended.

INDM 212 AC Electrical Systems**4 Cr Hrs**

This course builds on AC electrical theory gained in INDM 112 including the integration of electrical circuits into larger systems. Prerequisite: INDM 112 AC Electrical Circuits I.

INDM 214 AC Electrical Motor Applications**2 Cr Hrs**

This course builds on knowledge and skills gained in INDM 161 and 165 including the integration of electrical motors and controls into larger systems. Prerequisite: INDM 165 Electrical Motor Controls.

INDM 216 Electrical Schematics**1 Cr Hr**

This course covers the interpretation of electrical diagrams, schematics, and drawings common to electrical applications.

INDM 224 Industrial Electricity**2 Cr Hrs**

This course consolidates and applies knowledge gained in electrical theory, generation, motor controls, and other Industrial Technology courses.

INDM 250 Programmable Logic Controllers I**2 Cr Hrs**

Students will identify and explain the basic components, operating characteristics, common programming languages, input/output interfacing, and troubleshooting of programmable logic controllers (PLC's). Students will connect, operate, and troubleshoot PLC's.

INDM 260 Programmable Logic Controllers II**2 Cr Hrs**

This course is a continuation and application of INDM 250. Prerequisite: INDM 250 Programmable Logic Controllers I.

INDM 270 Data Acquisition and Circuits**2 Cr Hrs**

This course is a study of transducers and measurement techniques including data conversion and computer data acquisition methods. The course will give students information on how resource data is collected and analyzed for the use in a variety of control situations (e.g. wind turbine yaw control).

WIND 101 Introduction to Wind Energy**3 Cr Hrs**

Introduction to Wind Energy students will be exposed to the many facets of the wind industry. This course will cover the history and development of the wind industry, terminology used in the industry, types and applications of various wind turbines, environmental and economic issues of the wind industry, the future of the wind industry, other topics that are appropriate.

WIND 105 Wind Turbine/Tower Safety**1 Cr Hrs**

Wind Turbine/Tower Safety will provide required skills and information for technicians to safely climb and navigate wind turbine towers and nacelles. Students will be required to climb a turbine tower or equivalent as a component of this course. Prerequisite: Permission of Program Manager.

WIND 123 Wind Energy Internship**6 Cr Hrs**

Students will serve an internship in the wind industry with approval of the instructor. This course is variable credit depending on number of contact hours: 45 hours per credit hour. Students can repeat this course as needed to complete graduation requirements.

WIND 155 Wind Turbine Mechanical Systems**2 Cr Hrs**

Wind Turbine Mechanical Systems will expose the wind energy students to the installation, use, maintenance, and troubleshooting of mechanical drive components. This course will cover basic principles of wind energy mechanical systems with practical hands-on tasks which will be encountered in the wind industry.

WIND 160 Wind Turbine Tower Systems**1 Cr Hr**

Wind Turbine Tower Systems provides the student an introduction to the systems and maintenance requirements of wind turbine towers.

WIND 201 Air Foils and Blades**2 Cr Hrs**

Students will be exposed to many facets of the blades of the wind turbine industry. This course will cover basic principles of the design, construction, maintenance, and repair of composite wind turbine blades. The airfoil portion of this class will cover the aerodynamic basics of the turbine blades using the wind to convert one form of energy to another. Composite materials will be studied as they are used in the manufacturing process of wind turbine blades.

WIND 260 Power Generation, Transmission and Distribution**3 Cr Hrs**

This course serves as an introduction to the generation of electrical power with a wind turbine generator, moving that power through a local transmission system to a substation where a customer will purchase the generated power. This course will cover all aspects of working with components of a high voltage transmission system.