Bachelor of Applied Science

Student Learning Outcomes

Graduates of the BAS degree program will have the knowledge and skills to:

- Understand the social responsibilities of being a member of a professional community and the ethical values which are integral to personal and professional success.
- Identify and access information and be able to interpret, summarize, synthesize and convey this information to others using a variety of technology platforms.
- Understand the key concepts and be able to demonstrate the ability to apply the latest knowledge, techniques, concepts and tools of a profession to solve problems and address the needs of society, organizations and individual clients.
- Demonstrate knowledge of the relationship of professionals to society at large, the role of the professional as part of that society and the ability to analyze how changes in technology will impact the future of their profession and its relationship with society.
- Demonstrate skills and abilities in critical thinking, creativity, communication and analysis to facilitate career progression in their profession.

Accreditation

The program has been approved by the Northwest Commission on Colleges and Universities.

Mission Statement

The mission of the Bachelor of Applied Science is to fulfill and to extend the mission and philosophy of Great Basin College by providing a distinctive baccalaureate degree that builds upon the technical skills and knowledge acquired in attaining an Associate of Applied Science and, in particular cases, an Associate of Science or Associate of Arts degree. In this endeavor, the program is designed to instill abilities and qualities of competence, personal communication, management, and decision making within a broader context than a single vocation. The program will build on the individual's current vocational abilities and provide additional managerial skills within a specific field of emphasis. Those completing the program should then be prepared to competently and efficiently engage their chosen vocational field as either highly trained technicians or effective managers.

Purpose Statement

The purpose of the Bachelor of Applied Science (BAS) Program is to provide a quality and affordable fouryear degree to residents of rural Nevada. This degree is particularly suited to accommodate working adults whose schedules may be limited due to work and time constraints.

Contact Information

Bachelor of Applied Science degree program, 775.753.2363 or 775.753.2217.

About the Program Greater Accessibility

The program is designed for students who have previously completed an associate's degree at an accredited college or university. There are currently six emphases: Digital Information Technology Emphasis, Human Services Emphasis, Instrumentation, Land Surveying/Geomatics, Management and Supervision Emphasis, and Graphic Communications. These are particularly attractive to employers of the school's service area and provide an avenue of continuing education for all persons with work experience to complete a baccalaureate degree at Great Basin College.

Meets Employer Demand

The program is intended to build on the student's associate degree curricula, work experience, and maturity. It will provide the student with communication and problem solving skills, management and organizational theories and practice, and a broad liberal arts view of the world and workplace. This training is designed to prepare students for employment in demanding management positions, depending on the emphasis a student selects. The focus in the curriculum on the values of lifelong learning and positive human relation skills will be especially beneficial to graduates of this program.

Program Strengths

This degree program addresses many of the widely acknowledged deficiencies of the traditional bachelor's education. It represents a shift away from a narrowfocused, speciality program to a broader approach with courses taught by colleagues from across all disciplines at the College. This strategic adjustment allows our students to experience a broader array of values and attitudes about their field of study and to enlist the alliance of employers within our service area as educational partners and stakeholders in the success of this degree program. We believe these learning partnerships allow Great Basin College to deliver an innovative training program whose graduates are sought out because:

- 1. GBC's program is more reflective of the ideal bachelor's educational philosophy: a broad liberal arts exposure.
- 2. The program instills in its graduates professional ethics and leadership skills needed to make critical decisions.
- 3. The program supplies students with a unifying operational and practical framework for problem

solving; thus, stakeholder value is enhanced and a position of distinctiveness in bachelor's level education in this region is achieved.

GBC's academic approach to the delivery of education will help students become innovative leaders and practitioners in organizations that value continuous renewal of their culture and management approach. This gives our graduates a significant, distinct, comparative advantage in their chosen career fields.

Admission to the Program

Students will be admitted to the program in a Full Admission status when all admission requirements have been completed and accepted by the Program Supervisor and/or Emphasis Advisors. Students who do not maintain good standing, as defined, will be placed on Probationary Status. Students on probationary status are not allowed to continue toward completion of the program until they have removed all restrictions. The manner for reinstatement to good standing will be determined by the Committee on a case-by- case basis.

To be officially admitted to the Bachelor of Applied Science Program, students should do the following.

STEP 1: Inquiries

As soon as practical, applicants should meet with a faculty program advisor to outline a proposed course of study.

STEP 2: Application Process

Students must present evidence of completion of an associate's degree from a regionally accredited college.

Students should submit transcripts indicating an overall grade-point average (GPA) equal to or greater than 2.0, as calculated by Great Basin College formulas. Students should submit a program application to the Admissions and Records Office before completion of 30 credits in the program.

STEP 3: Follow Up

Students have the responsibility to ensure that official transcripts and any other requirements are actually received by the Director of Admissions and Registrar of Great Basin College.

NOTE: Evaluation of the entrance criteria will be made by the Program Supervisor and/or Emphasis Advisors. This processing takes approximately five to six weeks. Students will be notified by a letter from the Program Supervisor upon acceptance/denial.

Pre-admission Information

Some emphases of the program may have their own special admission requirements.

- Completion of an approved electrical program is required before official admission to the Instrumentation program.
- The Graphic Communications emphasis requires an AAS in Computer Technology with a Graphic Communications emphasis for admission, or advisor permission.
 - See the Land Surveying/Geomatics emphasis for a list of prerequisites.
 - The Digital Information Technology Emphasis requires an associate's degree, and a strong background in computer technology with an emphasis in one of the many computer technology fields, such as networking, information technology, computer office technology, computer programming, GIS, or some other computing field.
 - See the Human Services Emphasis for a list of prerequisites.
 - Students with a bachelor's degree from a regionally accredited college or university will not be required to take general education courses unless they are listed under the Emphasis Requirements or are needed as prerequisites for more advanced requirements.

Maintaining Good Standing

Students who have been admitted to the Bachelor of Applied Science Program will maintain their status as students in good standing, and be allowed to graduate, if they meet the following requirements:

- Maintain an overall 2.0 cumulative GPA in all GBC courses.
- Maintain a cumulative GPA of 2.0 in all upperdivision courses applied to the degree. This includes courses taken at GBC and those transferred from other institutions.
- Refer to specific BAS program emphasis for any variation of requirements .

Total Minimum	Credits for BAS	120
Total Minimum	Upper-Division Credits	42

Career and Technical Education

Bachelor of Applied Science— Instrumentation Emphasis

Student Learning Outcomes

Graduates with a BAS with an emphasis in Instrumentation will be able to:

- Interpret and apply the concepts of process control as related to current industry standard.
- Appraise and interpret measurements of temperature, pressure, flow and levels.
- Evaluate and install, maintain, calibrate, program and replace the control and monitoring equipment used in industrial process automation.
- Apply critical thinking skills, time management, and analytical thinking to solve technical problems while demonstrating knowledge of the industry terminology and nomenclature needed to communicate with industry technicians.
- Demonstrate knowledge of business practices and principles at a level sufficient for either operating their own business or to serve as a manager for a business entity.
- Perform safely in the work environment, meeting and obeying all workplace safety requirements.

See page 90 for important additional information about the Bachelor of Applied Science Program.

General Education Requirements Credits (beyond those required for AAS)				
СОМ	101	Oral Communication, or		
THTR	102	Introduction to Stage Voice, or		
THTR	221	Oral Interpretation		
ENG	333	Professional Communications		
STAT	152	Principles of Statistics I, or		
MATH	181	Calculus I3-4		
lNT	339	Integrative Humanities Seminar		
lNT	349	Integrative Social Science Seminar3		
lNT	359	Integrative Mathematics Seminar		
PHIL	311	Professional Ethics		
		(formerly ECON 311)3		
Total Credits				

Applied Science Core Requirements

INT 369	Integrative Science Seminar, or
PHYS 152	General Physics, or
PHYS 181	Physics for Scientists and
	Engineers II
FIN 310	Applied Accounting and Finance
MGT 310	Foundations of Management
	Theory and Practice
MGT 323	Organizational Behavior and
	Interpersonal Behavior, or
MGT 367	Human Resource Management
Total Credi	ts 12-13

Program Emphasis Requirements

EIT	233	Introduction to Instrumentation
EIT	240	Advanced Topics in Instrumentation2
EIT	315	Pressure, Level, Flow Measurement4
EIT	323	Installation and Configuration
EIT	333	Process (Piping) and Instrument
		Diagrams (P&IDs)2
EIT	336	Control Valves and Regulators
EIT	348	Temperature Measurement
		and Control3
EIT	368	Measurement Systems Analysis
EIT	437	Computer Analog Control3
EIT	468	Advanced Control Systems
		(Capstone)
MGT	441	Operational Quality Control and
		Problem Solving
Total Credits		

Note: All students graduating from Nevada institutions of higher education must satisfy the U.S. and Nevada Constitutions requirement. Contact your academic advisor for details.

SUGGESTED COURSE SEQUENCE BAS—Instrumentation Emphasis				
FALL-1	st Semester	Credits		
EIT	233	4		
EIT	315	4		
EIT	323	3		
EIT	333	2		
ENG	333	3		
INT	339, 349 or 359	3		
TOTAL		19		
SPRING	9–2nd Semester	Credits		
EIT	240	2		
EIT	348	3		
EIT	336	4		
EIT	368	2		
EIT	437	3		
EIT	468	3		
FIN	310	3		
TOTAL		20		
FALL-	3rd Semester	Credits		
STAT	152 or MATH 181	3-4		
COM	101, THTR 102, or THTR 221	3		
PHIL	311 (formerly ECON 311)	3		
INT	339, 349 or 359	3		
MGT	310	3		
TOTAL		15-16		
SPRING	G—4th Semester	Credits		
INT 369	, PHYS 152, or PHYS 181	3-4		
INT	339, 349 or 359	3		
	323 or 367	3		
MGT	441	3		
TOTAL		12-13		
Refer to page 81.				