

# Bachelor of Applied Science

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## Student Learning Outcomes

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

- Explain the social, economic, and legal contexts within which businesses operate. Understand that this context is global, demonstrating an appreciation of opportunities and perspectives associated with other cultures.
- Demonstrate theoretical and practical understanding of concepts, models, and techniques associated with effective management.
- Interact effectively with others in situations requiring team building, leadership, change, and negotiation.
- Access information and interpret, summarize, synthesize, and convey this information to others using state-of-the-art technology retrieval, analysis, and presentation software and equipment.
- Effectively communicate ideas, observations, analyses, conclusions, and recommendations to others in a variety of professional contexts.
- Appropriately use the frameworks from relevant business functional areas to interpret and analyze business situations and identify and solve problems.
- Assess customer needs and develop effective approaches to customer service.
- Understand the social responsibilities as members of a community, and ethical values which are integral to personal, social, and professional success.

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### 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 individuals 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 four-year 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, 775.753.2104.

### 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 three emphases: Instrumentation, Management in Technology, and Land Surveying/Geomatics. These are particularly attractive to employers of the region's mining industry 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, providing them with communication and problem solving skills, management and organizational theories and practice, technical and mathematical competencies, and a broad, liberal arts view of the world and the workplace. This training will prepare students for employment in demanding management positions of many career fields, depending on the emphasis they select. The emphasis 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 academic business education. It represents a shift away from a narrow-focused, strictly business faculty taught regimen to a best practices approach of business 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 management practices 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 managerial training program whose graduates are sought out because:

1. GBC's program design is more reflective of the ideal business manager's educational philosophy, a broad liberal arts exposure.
2. The program creates within GBC's students convictions which encourage making tough management 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 management education in this region is achieved.

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

An innovative leader is one who exercises responsibility, detects opportunity, assumes risk borne out of conviction, and marshals resources to convert the opportunity into reality. To achieve these outcomes an ideal BAS curriculum addresses four managerial and cognitive components/issues. The first involves themes which develop an understanding of the conceptual foundations of business/social responsibility and ethical reasoning skills; the second includes critical thinking, a global perspective, creativity, and whole-brain problem-framing; the third involves notions of self-awareness, path finding, and risk-taking tolerances; the fourth includes an understanding of the management theory and practices used by learning organizations and such skills as team participation, leadership determination, negotiation and persuasion, problem-solving and mature judgment, and, finally, organizational and political savvy. Achieving these attributes, graduates will create partnerships with cross-campus units and acquire unique abilities in problem-framing/solving while developing plausible managerial solutions.

### **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 Committee. 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 adviser to outline a proposed course of study.

### **STEP 2: Application Process**

Students must present evidence of completion of one of the following associate's degree patterns:

1. An Associate of Applied Science degree from an accredited college.
2. An Associate of Science or Associate of Arts degree or other degrees as deemed appropriate by the Committee, plus a resumé demonstrating relevant experience.
3. Any technical associate's degree that is not an AAS, if it is from an accredited college and includes more than 50% technical/vocational courses (as determined by your adviser).

Acceptable evidence would be the diploma and/or official transcripts. 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 Committee before completion of 30 credits in the program. The deadline for submitting this application will be September 1 of each year for the Fall Semester and February 1 for the Spring Semester. Students should have completed the requirements for an associate's degree prior to making application.

### **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. These should be received by the application deadlines in order to receive Full Admission to the BAS Degree Program.

**NOTE:** Evaluation of the entrance criteria will be made by the Committee. This processing takes approximately five to six weeks. Students will be notified by letter from the Director of Admissions and Registrar upon acceptance/denial.

### **Pre-admission Information**

Some emphases of the program may have their own special admission requirements. At present this includes the Instrumentation and the Land Surveying/Geomatics emphases:

- Completion of an approved electrical program is required before official admission to the Instrumentation program can occur. In addition, students entering the program must complete the Career and Technical Education Program application for admission found on the program web page.
- See the Land Surveying/Geomatics emphasis for a list of prerequisites.
- Students with bachelor's degrees 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 GPA.
- Receive no lower than a C- in all program requirements.

**Total Minimum Credits for BAS..... 120**  
**Total Minimum Upper-Division Credits..... 51**

**Digital Information Technology Emphasis**

**I. General Education (beyond those required for AAS)**

COM 101	Oral Communication, or	
THTR 221	Oral Interpretation. ....	3
ENG 333	Professional Communications.....	3
AMS 310	Mathematical Systems Applied to Technology, or	
MATH 181	Calculus I.....	3-4
INT 339	Integrative Humanities Seminar.....	3
INT 349	Integrative Social Science Seminar.....	3
INT 359	Integrative Mathematics Seminar. ....	3
INT 369	Integrative Science Seminar. ....	3
ECON 311	Professional Ethics, or	
PHIL 311	Professional Ethics. ....	3
	U.S. and Nevada Constitution. ....	(1-3)

(If student has not completed the equivalent, such as transferring to GBC from an out-of-state school.)

**Total credits for Section I..... 24-28**

**II. Applied Science Core**

FIN 310	Applied Accounting and Finance. ....	3
MGT 310	Foundations of Management Theory and Practice. ....	3
MGT 323	Organizational and Interpersonal Behavior, or	
MGT 367	Human Resource Management.....	3
AMS 320	Science and Engineering in Technology, or	
PHYS 180	Physics for Scientists and Engineers I. ...	3-4
MGT 441	Operational Quality Control and Problem Solving. ....	3

**Total Credits for Section II..... 15-16**

**III. Emphasis Requirements**

CIT 301	Network Management Essentials, or	
CIT 302	Programming and Web Development Essentials, or	
COT 301	Database Management Essentials, or	
GIS 301	Geographic Information Systems Essentials, or	
GRC 301	Graphic Communication Management Essentials. ....	3

Since students in this emphasis come from a variety of AAS computing areas, they will need upper-division refresher courses outside their AAS emphasis. Select with instructor's approval three of the above one-credit courses that are outside of AAS specialization.

CIT 361	TCP/IP: Managing Network Resources, or	
IS 470	Computer Security, Controls and Information Assurance.....	3
CIT 454	eCommerce.....	3
COT 490	Digital Communications (Capstone).....	3
IS 301	Management Information Systems, or	
CIT 480	SQL Database Design and Implementation. ....	3
GIS 320	GIS in Business and Community.....	3
GRC 319	Advanced Multimedia Design: Typography and Graphics, or	
GRC 383	Advanced Multimedia Design: Video and Audio. ....	3

**Total Credits for III ..... 21**

**SUGGESTED COURSE SEQUENCE\*\*\*  
 BAS—Digital Information Technology**

FALL—1st Semester	Credits	
Three of the following: CIT 301, COT 301, CIT 302, GIS 301, GRC 301**		
AMS 310	3	<input type="checkbox"/>
ECON 311	3	<input type="checkbox"/>
ENG 333	3	<input type="checkbox"/>
MGT 310	3	<input type="checkbox"/>
<b>TOTAL</b>	<b>15</b>	
<b>SPRING—2nd Semester</b>		
AMS 320	3	<input type="checkbox"/>
COM 101 or THTR 221	3	<input type="checkbox"/>
GRC 319 or GRC 383	3	<input type="checkbox"/>
INT 349 or INT 359	3	<input type="checkbox"/>
MGT 323 or MGT 367	3	<input type="checkbox"/>
<b>TOTAL</b>	<b>15</b>	
<b>FALL—3rd Semester</b>		
CIT 361 or IS 470	3	<input type="checkbox"/>
CIT 454	3	<input type="checkbox"/>
GIS 320	3	<input type="checkbox"/>
INT 339 or INT 369	3	<input type="checkbox"/>
IS 301 or CIT 480	3	<input type="checkbox"/>
<b>TOTAL</b>	<b>15</b>	
<b>SPRING—4th Semester</b>		
COT 490	3	<input type="checkbox"/>
FIN 310	3	<input type="checkbox"/>
INT 339 or INT 349	3	<input type="checkbox"/>
INT 359 or INT 369	3	<input type="checkbox"/>
MGT 441	3	<input type="checkbox"/>
<b>TOTAL</b>	<b>15</b>	

\*\*Select with Adviser  
 \*\*\*See page 57.

## Instrumentation Emphasis

### I. General Education (beyond those required for AAS)

COM	101	Oral Communication, or	
THTR	221	Oral Interpretation. . . . .	3
ENG	333	Professional Communications. . . . .	3
AMS	310	Mathematical Systems Applied to Technology, or	
MATH	181	Calculus I. . . . .	3-4
INT	339	Integrative Humanities Seminar. . . . .	3
INT	349	Integrative Social Science Seminar. . . . .	3
INT	359	Integrative Mathematics Seminar. . . . .	3
INT	369	Integrative Science Seminar. . . . .	3
ECON	311	Professional Ethics, or	
PHIL	311	Professional Ethics. . . . .	3
MATH	126	Precalculus I. . . . .	3
		U.S. and Nevada Constitution. . . . .	(1-3)

(If student has not completed the equivalent, such as transferring to GBC from an out-of-state school.)

**Total credits for Section I. . . . . 27-31**

### II. Applied Science Core

FIN	310	Applied Accounting and Finance. . . . .	3
MGT	310	Foundations of Management Theory and Practice. . . . .	3
MGT	323	Organizational and Interpersonal Behavior, or	
MGT	367	Human Resource Management. . . . .	3
AMS	320	Science and Engineering in Technology, or	
PHYS	180	Physics for Scientists and Engineers I. . . . .	3-4
MGT	441	Operational Quality Control and Problem Solving. . . . .	3

**Total Credits for Section II. . . . . 15-16**

### III. Emphasis Requirements

EIT	233	Introduction to Instrumentation. . . . .	4
EIT	240	Advanced Topics in Instrumentation. . . . .	2
EIT	315	Pressure, Level, Flow Measurement . . . . .	4
EIT	323	Installation and Configuration. . . . .	3
EIT	333	Process (Piping) and Instrument Diagrams (P&IDs). . . . .	2
EIT	336	Control Valves and Regulators. . . . .	4
EIT	348	Temperature Measurement and Control. . . . .	3
EIT	368	Measurement Systems Analysis. . . . .	2
EIT	437	Computer Analog Control. . . . .	3
EIT	468	Advanced Control Systems (Capstone) . . . . .	3

**Total Credits for Section III . . . . . 30**

## SUGGESTED COURSE SEQUENCE\*

### BAS—Instrumentation

FALL—1st Semester		Credits	
EIT	233	4	<input checked="" type="checkbox"/>
EIT	315	4	<input type="checkbox"/>
EIT	323	3	<input type="checkbox"/>
EIT	333	2	<input type="checkbox"/>
ENG	333	3	<input type="checkbox"/>
INT	339 or INT 369	3	<input type="checkbox"/>
MATH	126	3	<input type="checkbox"/>
PSC	100 or PSC 101	1-3	<input type="checkbox"/>
<b>TOTAL</b>		<b>23-25</b>	

SPRING—2nd Semester		Credits	
EIT	240	2	<input checked="" type="checkbox"/>
EIT	348	3	<input type="checkbox"/>
EIT	336	4	<input type="checkbox"/>
EIT	368	2	<input type="checkbox"/>
EIT	437	3	<input type="checkbox"/>
EIT	468	3	<input type="checkbox"/>
FIN	310	3	<input type="checkbox"/>
<b>TOTAL</b>		<b>21</b>	

FALL—3rd Semester		Credits	
AMS	310 or MATH 181	3-4	<input checked="" type="checkbox"/>
COM	101 or THTR 221	3	<input type="checkbox"/>
ECON	311 or PHIL 311	3	<input type="checkbox"/>
INT	349 or INT 359	3	<input type="checkbox"/>
MGT	310	3	<input type="checkbox"/>
<b>TOTAL</b>		<b>15-16</b>	

SPRING—4th Semester		Credits	
AMS	320 or PHYS 180	3-4	<input checked="" type="checkbox"/>
INT	349 or INT 369	3	<input type="checkbox"/>
INT	339 or INT 359	3	<input type="checkbox"/>
MGT	323 or MGT 367	3	<input type="checkbox"/>
MGT	441	3	<input type="checkbox"/>
<b>TOTAL</b>		<b>15-16</b>	

\*See page 57.

## Management in Technology Emphasis

### I. General Education (beyond those required for AAS)

COM	101	Oral Communication, or	
THTR	221	Oral Interpretation. . . . .	3
ENG	333	Professional Communications. . . . .	3
AMS	310	Mathematical Systems Applied to Technology, or	
MATH	181	Calculus I. . . . .	3-4
INT	339	Integrative Humanities Seminar. . . . .	3
INT	349	Integrative Social Science Seminar. . . . .	3
INT	359	Integrative Mathematics Seminar. . . . .	3
INT	369	Integrative Science Seminar. . . . .	3
ECON	311	Professional Ethics, or	
PHIL	311	Professional Ethics. . . . .	3
		U.S. and Nevada Constitution. . . . .	(1-3)

(If student has not completed the equivalent, such as transferring to GBC from an out-of-state school.)

**Total credits for Section I. . . . . 24-28**