### **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 .

<b>Total Minimum</b>	Credits for BAS	120
<b>Total Minimum</b>	<b>Upper-Division Credi</b>	ts42

# Land Surveying/Geomatics

## Bachelor of Applied Science — Land Surveying/Geomatics Emphasis

#### **Student Learning Outcomes**

Graduates with a BAS with an emphasis in Land Surveying/Geomatics will be able to:

- Proficiently apply sound measurement methods, mathematics, science, and surveying tools to collect, analyze, and edit spatial information in professional applications.
- Develop a sound background in the humanities, social sciences, and the arts, to function in multicultural and diverse environments.
- Provide fundamentals in business management to enable graduates to understand business environments and decision-making processes.
- Convey spatial information in graphical, textual, and verbal forms as an individual or as a collaborating member of a professional team.
- Prepare to take and pass the Fundamentals of Land Surveying examination developed by the National Council of Examiners for Engineering and Surveying (NCEES).
- Satisfy the educational requirements for licensure required by NRS.625.270 as a professional Land Surveyor in Nevada and recognize the benefit of life-long learning by participating in continuing education as students or as instructors.

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

Entrance to the Land Surveying/Geomatics Emphasis requires an earned associate's degree and the completion of a college-level trigonometry course.

#### **Prerequisite Requirements**

The following courses or transfer equivalents are prerequisites for completion of the upper-division emphasis requirements:

CADD	121	CAD for Land Surveyors
GIS	109	Introduction to Geographic
		Information Systems
MATH	181	Calculus I
PHYS	151	General Physics I or
PHYS	180	Physics for Scientists and Engineers I
STAT	152	Introduction to Statistics
SUR	280	Fundamentals of Geomatics I
SUR	281	Fundamentals of Geomatics II
SUR	290	Introduction to Urban Development

#### **General Education Requirements**

		-	
СОМ	101	Oral Communication, or	
THTR	102	Introduction to Stage Voice, or	
THTR	221	Oral Interpretation	.3
PHIL	311	Professional Ethics (formerly ECON 311)	.3
ENG	333	Professional Communications	.3
INT	339	Integrative Humanities Seminar, or	
INT	349	Integrative Social Science Seminar	.3
INT	359	Integrative Mathematics Seminar	.3
Total C	redit	s	15

#### **Applied Science Core Requirements**

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FIN	310	Applied Accounting and Finance3
MGT	310	Foundations of Management
		Theory and Practice
MGT	323	Organizational Behavior and
		Interpersonal Behavior, or
MGT	367	Human Resource Management
INT	369	Integrative Science Seminar, or
PHYS	152	General Physics II or
PHYS	181	Physics for Scientists
		and Engineers II4
		(PHYS required for Land Surveying/
		Geomatics Degree)
Total C	redit	s13

## Program Emphasis Requirements

		F
CADD 4	21	Advanced CAD for Land Surveyors3
MATH 1	82	Calculus II4
SUR 2	55	Introduction to Mine Surveying and
SUR 4	56	Advanced Mine Surveying, or
SUR 4	50	Construction Surveying
SUR 3	20	GIS for Surveyors3
SUR 3	30	Introduction to Least Squares
		Adjustment3
SUR 3	40	Photogrammetry and Remote Sensing3
SUR 3	60	Public Land Survey System3
SUR 3	65	Legal Descriptions3
SUR 4	40	Geodetic and GPS Surveying3
SUR 4	60	Advanced Boundary Analysis3
SUR 4	95	Land Surveying/Geomatics Capstone3
Total Credits 34-35		

#### Total Credits for Sections Above ...... 62-63

**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.

Land/Geomatics Surveying

#### SUGGESTED COURSE SEQUENCE BAS—Land Surveying/Geomatics Emphasis

FALL—1st Semester Credits		
COM	101, THTR 102, or 221	3
INT	339 or 349	3
MATH	182	4
SUR	320	3
SUR	360	3
TOTAL		16
SPRING	–2nd Semester	Credits
INT	359	3
ENG	333	3
PHYS	152 or 181	4
SUR	330	3
SUR	365	3
TOTAL		16
FALL-3	Brd Semester	Credits
PHIL	311 (formerly ECON 311)	3
MGT	310	3
SUR	340	3
SUR	440	3
SUR	460	3
TOTAL		15
SPRING	-4th Semester	Credits
CADD	421	3
FIN	310	3
MGT	323 or 367	3
SUR	255 and 456, or 450	3-4
SUR	495	3
TOTAL		15-16
Refer to page 81. Minimum Credits: 62-63		

**Note:** Students admitted to the BAS program with an associate's degree other than an Associate of Arts or Associate of Science will be required to take both INT 339 and INT 349 increasing the BAS-LSG degree total credits to 65-66 for graduation.