

ACADEMIC PROGRAM PROPOSAL FORM

DIRECTIONS: Use this form when proposing a new major or primary field of study, new emphasis, or new degree program.

| DATE SUBMITTED: | Date of AAC Approval: | | | | | | |
|---|---|-------------------------|--|--|--|--|--|
| INSTITUTION: College | March 2, 2016 | | | | | | |
| REQUEST TYPE: | New DegreeNew Major or Primary Field of StudyNew Emphasis | Date of Board Approval: | | | | | |
| DEGREE (i.e. Bachelor of Science): Bachelor of Applied Science | | | | | | | |
| MAJOR (i.e. Animal Sc | ience): Fire and Emergency Services Administration | 1 | | | | | |
| EMPHASIS (i.e. Equine Studies): | | | | | | | |
| CDEDITS TO DECDEE, 121 | | | | | | | |

Action requested:

Approval of a Bachelor of Applied Science (BAS) degree in Fire and Emergency Services Administration at the College of Southern Nevada.

A. Brief description and purpose of proposed program

PROPOSED SEMESTER OF IMPLEMENTATION: Fall 2017

This Bachelor of Applied Science Degree in Fire and Emergency Services Administration is intended for students who wish to hone their managerial skills and further compliment the technical skills they have already acquired with the AAS Degree in Fire Science Technology Management. This BAS will advance career promotional opportunities beyond the AAS degree and provides fire service personel a clear academic pathway with stackable credentials. Students will complete additional coursework that is compliant with the Fire and Emerency Services Higher Education (FESHE) model curriculum. The BAS degree will be granted to students who have successfully completed an AAS degree in fire science or a closely related degree from a regionally accredited community college and matriculate to complete the core and non-core courses recommended by FESHE.

B. Statement of degree or program objectives

Students will acquire the knowledge and skills needed to be entry level competent in the areas of:
- Community Risk Reduction

- Fire and Emergency Services Administration
- Fire Prevention Organization and Management
- Personnel Management for the Fire and Emergency Services
- Political and Legal Foundations of Fire Protection
- Public Fire Proection
- Fire Dynamics
- Disaster Planning and Control
- Fire Protection Structures and Systems
- Fire Related Human Behavior
- Managerial Issues in Hazardous Materials

C. Plan for assessment of degree or program objectives

Curriculum will mirror the FESHE Model Curriculum as published by the National Fire Academy. This FESHE Model Curriculum includes core courses and non-core courses. The CSN degree plan will include both core and non-core courses.

Degree plan will be submitted to FESHE for program approval.

D. Plan for assessment of student learning outcomes and the use of this data for program improvement

Assessment of student learning outcomes is faculty, student and employer driven. CSN will utilize the following assessment methodologies to assess achievement of student learning outcomes:

- Graduate feedback six months' after program completion
- Employer feedback six nine months' after program completion
- Assessment rubric of student work samples

Data from these assessment methods will be shared with program faculty and program advisory committee for program improvement.

E. Contribution and relationship of program objectives to

i. NSHE Master Plan

As stated in the 2013-2016 Planning Report from NSHE to the Board of Regents, this BAS degree program:

- Provides students with career and technical options consistent with current and forecasted economic development and workforce goals of the state.
- Aligns workforce development priorities with the state plan for economic development. This program is aligned with the targeted workforce sector.
- Strengthens degrees and certificates that link to identified future jobs sought by Nevada and its economic development plan.

ii. Institutional mission

The mission of CSN is to create opportunities and change lives through access to quality teaching, services, and experiences that enrich our diverse community.

iii. Campus strategic plan and/or academic master plan

This BAS degree is included in the 2012-2016 acaemic master plan for CSN.

iv. Department and college plan

This BAS degree resides in the Department of Public Safety and Human Services where the AAS degree also resides.

v. Other programs in the institution

This BAS program provides advanced educational opportunity for completers of the AAS Fire Technology Management from CSN.

vi. Other related programs in the System

The BAS Fire Science Management was deactivated by Nevada State College in November 2012. This BAS at CSN provides advanced educational opportunities for completers of the AAS Fire Technology Management from CSN and TMCC.

F. Evaluation of need for the program

i. Intrinsic academic value of program within the discipline

Fulfills a workforce need in the fire service agencies in Nevada. There is currently no fire science-related baccalaureate program in Nevada.

ii. Evidence of existing or projected local, state, regional, national and/or international need for program

Nationally and in Nevada, firefighter employment growth is expected to grow at national rates currrently estimated to be 5%. Promotion in the fire service requires a baccalaureate degree to achieve captain and battalion chief levels. There is currently no opportunity in Nevada to achieve this level of education. Consequently firefighters must find out of state resources to achieve this education requirement.

iii. If this or a similar program already exists within the System, what is the justification for this addition

NA

iv. Evidence of employment opportunities for graduates (state and national)

Fire Department Chiefs in the Southern Nevada Region have expressed the need to provide this education opportunity to retain Nevada Fire Fighters in Nevada. Considering the 1700 firefighters in Nevada.

v. Student clientele to be served (Explain how the student clientele is identified)

Students aspiring to leadership positions in the fire service. Student clientele are identified in the AAS program and from fire department leadership.

G. Detailed curriculum proposal

i. Representative course of study by year (options, courses to be used with/without modification; new courses to be developed)

Please see attached guided pathway and curriculum sheet.

ii. Program entrance requirements

Application and acceptance to the College of Southern Nevada

iii. Program completion requirements (credit hours, grade point average; subject matter distribution, preprogram requirements)

Please see attached Course Sheet.

- iv. Accreditation consideration (organization (if any) which accredits program, requirements for accreditation, plan for attaining accreditation include costs and time frame)

 NA
- v. Evidence of approval by appropriate committees of the institution All courses have been approved by the CSN curriculum committee.

H. Readiness to begin program

- i. Faculty strengths (specializations, teaching, research, and creative accomplishments
 Faculty will be Nevada Fire Marshall Certified firefighters in leadership positions. Majority will
 have Masters in Public Administration or equivalent degrees. Many will be Chiefs in the Nevada
 Fire Service.
- ii. Contribution of new program to department's existing programs (both graduate and undergraduate) and contribution to existing programs throughout the college or university. The Associate of Applied Science Degree in Fire Technology Management will become the foundation for the first two years of the Bachelor's in Applied Science Degree in Fire Science Management. Courses will build on this foundation with the only addition of
- iii. Completed prior planning for the development of the program (recent hires, plans for future hires, securing of space, curricular changes, and reallocation of faculty lines)
 The degree will utilitze current part-time faculty and resources used to achieve the AAS degree.
 The program will capitalize on the AAS and the upper division classes will utilize online resources.
- iv. Recommendations from prior program review and/or accreditation review teams Program review recommends the development of the BAS.
- v. Organizational arrangements that must be made within the institution to accommodate the program

The current organization of the Fire Science program will remain as currently configured using the Director of Fire Science supported under the School for Business, Hospitality and Public Services. Online support already exists for the program.

I. Resource Analysis

i. Proposed source of funds (enrollment-generated state funds, reallocation of existing funds, grants, other state funds)

The program will utilize existing funds. The upper division courses are low overhead online courses using primarily part-time faculty. The income derived from tuition and fees is antivipated to offset the additional salary expenses for the additional classes.

- ii. Each new program approved must be reviewed for adequate full-time equivalent (FTE) to support the program in the fifth year. Indicate if enrollments represent 1) students formally admitted to the program, 2) declared majors in the program, or 3) course enrollments in the program.
 - a. (1) Full-time equivalent (FTE) enrollment in the Fall semester of the first, third, and fifth year.

1st Fall semester 12

3rd Fall semester 32

5th Fall semester 32

(2) Explain the methodology/assumptions used in determining projected FTE figures. All students will be declared majors for the BAS degree. Assumptions include an incoming class each year of 15 new students. Assume a 10% drop rate each year in the upper division. All students entering the BAS will have achieved an associate degree in fire science. Students will be expected, as a cohort, to take 12 credits per semester for 5 semesters.

b. (1) Unduplicated headcount in the Fall semester of the first, third, and fifth year.

1st Fall semester 60

3rd Fall semester 160

5th Fall semester 160

(2) Explain the methodology/assumptions used in determining projected headcount figures.

Assumptions include an incoming class each year of 15 new students. Assuming a 10% drop rate each year in the upper division. Assuming all student entering the BAS will be associate degreed students. Each student in the cohort will take 12 credits per semester.

iii. Budget Projections – Complete and attach the Five-Year Budget Projection Table. See attached spreadsheet.

J. Facilities and equipment required

- i. Existing facilities: type of space required, number of assignable square feet, space utilization assumptions, special requirements, modifications, effect on present programs Online classes will not require additional space.
- ii. Additional facilities required: number of assignable square feet, description of space required, special requirements, time sequence assumed for securing required space No additional facilities required.
- iii. Existing and additional equipment required
 Online class will not require additional equipment.
- K. Student services required Plans to provide student services, including advisement, to accommodate the program, including its implications for services to the rest of the student body

The School of Business, Hospitality and Public Sevices will provide the necessary couseling services required for students participating in the upper division program. Students would already have received services as they pursued the AAS.

- L. Consultant Reports If a consultant was hired to assist in the development of the program, please complete subsections A through C. A copy of the consultant's final report must be on record at the requesting institution.
 - i. Names, qualifications and affiliations of consultant(s) used NA
 - ii. Consultant's summary comments and recommendations NA
 - iii. Summary of proposer's response to consultants NA

M. Articulation Agreements

i. Articulation agreements were successfully completed with the following NSHE institutions. (Attach copies of agreements)

The program is self-articulating with the AAS degree in Fire Technology Management at CSN.

ii. Articulation agreements have not yet been established with the following NSHE institutions. (Indicate status) $\rm N\!/\!A$

iii. Articulation agreements are not applicable for the following institutions. (Indicate reasons) $\rm\,N/A$

N. Summary Statement

The Fire Technology Program Director was approached by HR representatives from the local fire departments in Clark County following a series of local news reports by various elected officials questioning why entities were having to pay large, out of state tuition reimbursements to their employees who were seeking fire science Bachelor degrees to out of state schools. The reason was there are no Bachelor Degree programs for fire science in the state of Nevada.

During one of the interviews, the head of the Clark County Commissioners requested that the college consider creating and instituting a Bachelor's Degree in the field of Fire Technology and Management. The requirement for higher division educational credits or degrees to qualify for promotional consideration has resulted in budgets being depleted due to out-of-state education reimbursements. County Commissioners felt educational monies should be kept in the State of Nevada.

The proposed Bachelor Of Applied Science in Fire and Emergency Services Administration directly aligns with the Associate of Applied Science in Fire Technology Management degree at the College of Southern Nevada. This degree was created to meet the needs of southern Nevada fire personnel seeking Bachelor's degrees to meet promotional qualifications. This degree meets the academic standards of excellence established by the Fire and Emergency Services Higher Education (FESHE) and the National Fire Academy. The program concentrates on fire fighting response, fire prevention, and fire administration and management. It is online, quality, cost-effective option for members of our local fire agencies to pursue academic credentials needed for higher positions of responsibilty.

New Academic Program Proposal Five-Year Program Cost Estimate

BAS Fire and Emergency

| Institution: | CSN | Program: | Services Admi | nistration | Semester of Impl | ester of Implementation: Fa | | all 2017 | |
|---|-----------------------|------------------|-----------------------|------------------|--------------------|-----------------------------|------------------|----------|--|
| <u>DIRECTIONS</u> : Complete the Studyear one must be noted by source | | ing cost estimat | es for the first, thi | rd, and fifth fo | r the proposed new | program in Sect | ion A. Any "new" | costs in | |
| STUDENT FTE: | | | Year 1: | 12 | Year 3: | 32 | Year 5: | 32 | |
| Section A. | | Year 1/Sta | | art-up | | 3 | Year 5 | | |
| | Existing ¹ | New ² | Total | FTE | Total | FTE | Total | FTE | |
| PERSONNEL | | <u> </u> | | | | | | | |
| Faculty (salaries/benefits) ³ | 0 | 9,900 | 9,900 | 0.8 | 29,700 | 2.4 | 29,700 | 2.4 | |
| Graduate Assistants | 0 | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | |
| Support Staff | 0 | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | |
| Personnel Total | \$0 | \$9,900 | \$9,900 | 8.0 | \$29,700 | 2.4 | \$29,700 | 2.4 | |
| OTHER EXPENSES | | | | | | | | | |
| Library Materials (printed) | 0 | 0 | 0 | | 0 | | 0 | | |
| Library Materials (electronic) | 0 | 1,000 | 1,000 | | 1,000 | | 0 | | |
| Supplies/Operating Expenses | 0 | 1,500 | 1,500 | | 1,500 | | 2,500 | | |
| Equipment | 0 | 0 | 0 | | 0 | | 0 | | |
| Other Expenses | 0 | 0 | 0 | | 0 | | 0 | | |
| Other Expenses Total | | \$2,500 | \$2,500 | | \$2,500 | | \$2,500 | | |
| TOTAL | \$0 | \$12,400 | \$12,400 | | \$32,200 | | \$32,200 | | |
| Castian B | | JL | | | | | | | |
| Section B. | | Amount | % | | | | | | |
| EXPLANATION OF "NEW" SOURCE | | Alliount | /6 | | | | | | |
| Tuition/Registration Fees |)E3 | 0 | 0.0% | | | | | | |
| Federal Grants/Contracts | | 0 | 0.078 | | | | | | |
| State Grants/Contracts | | 0 | 0.0% | | | | | | |
| Private Grants/Contracts | | 0 | 0.0% | | | | | | |
| Private Gifts | | 0 | 0.0% | | | | | | |
| Other (please specify) | | 12,400 | 100.0% | | | | | | |
| TOTAL | | \$12,400 | 100.0% | | | | | | |
| 4- | | | | | | | | | |

EXPLANATION (Please provide any additional information pertinent to the budget projection, including for example, explain for any new funding sources that are not guaranteed receipt by the institutions how the program will make-up for the potential loss in expected new funding.):

This program will be offered via online course offerings. The faculty expected to teach these upper division courses will be part time faculty. Part time faculty workload calculations are based on \$825 x number of credits. If each of these upper division courses are upper division, 3 credits, each part time instructor would be paid \$2475. Year one would necessitate 4 part time instructors, teaching 3 credits each would equal 0.20% FTE for each part time instructor. With 4 part time instructors, 4 x 0.20 = .80 FTE. There will be no new full time faculty employed for this program. Delivery in this online format will allow students to retain employment with respective fire services while completing this advanced degree. For explanation of "new" sources the \$12,400 will come from CSN's state-supported operating budget.

¹Resources allocated from existing programs to the proposed program in Year 1 should be noted in the "Existing" column.

²Any "New" resource utilized to fund a new program must include the source to be provided in the "Explanation of New Sources" section. Total "New" sources for the first year must equal the total under "Explanation of New Sources."

³Budget estimates for faculty salaries and benefits must include estimated merit and COLA increases in Year 3 and Year 5.

Guided Pathway Bachelor of Applied Science Fire and Emergency Services Administration 2017-2018

| First Semester | Requirement | Credit Hours | Term |
|--|---|--------------|------|
| Gen. Ed. English Composition Requirement | glish Composition Requirement ENG 333 Professional Communications | | |
| Gen. Ed. Fine Arts/Humanities/Social Sciences Req. | PHIL 302 Intermediate Reasoning and Critical Thinking | 3 | |
| Special Program Core Requirements | FT 291 Fire and Emergency Services Administration | 3 | |
| Special Program Requirements | FT 300 Fire Dynamics | 3 | |
| | Semester Total | 12 | |
| Second semester | Requirement | Credit Hours | Term |
| Gen. Ed. Mathematics Requirement | Math 120 or above (except MATH 122, 123) | 3 | |
| | FT 301 Political and Legal Foundations for Fire Protection | 3 | |
| Special Program Requirements | FT 302 Fire and Emergency Services Administration | 3 | |
| | FT 303 Personnel Management for Fire and Emergency Services | 3 | |
| | Semester Total | 12 | |
| Third Semester | Requirement | Credit Hours | Term |
| Gen. Ed. Natural Science Requirement | See degree sheet for course choices | 3 | |
| | FT 304 Fire Prevention Organization and Management | 3 | |
| Special Program Requirement | FT 305 Managerial Issues in Hazardous Materials | 3 | |
| | FT 306 Financial Management for Fire and Emergency Services | 3 | |
| | Semester Total | 12 | |
| Fourth Semester | Requirement | Credit Hours | Term |
| Gen. Ed. Fine Arts/Humanities/Social Sciences Req. | PHIL 311 Professional Ethics | 3 | |
| | FT 400 Fire Investigation and Analysis | 3 | |
| Special Program Requirement | FT 401 Fire Protection Structures and Systems | 3 | |
| | FT 402 Fire Related Human Behavior | 3 | |
| | Semester Total | 12 | |
| Fifth Semester | Requirement | Credit Hours | Term |
| | FT 403 Disaster Planning and Control | 3 | |
| Special Program Requirements | FT 404 Analytical Approaches to Public Fire Protection | 3 | |
| | FT 405 Community Risk Reduction for Fire and Emergency Services | 3 | |
| | FT 406 Applications of Fire Research | 3 | |
| | Semester Total | 12 | |
| | | | |
| | Pathway Course Total | 60 | |
| | Degree Total | 121 | |

BACHELOR OF APPLIED SCIENCE FIRE AND EMERGENCY SERVICES ADMINISTRATION REQUIRED CREDITS: 121

PROGRAM DESCRIPTION

This BAS degree is intended for students who wish to develop their managerial skills and further compliment the technical skills they have already acquired at the AAS degree level. The BAS will open up career pathways and promotional opportunities beyond what an AAS degree will provide. Students will complete additional coursework that has been approved by FESHE (Fire and Emerency Services Higher Education) model curriculum. The BAS degree will be granted to students who have successfully completed an AAS degree in fire science or a closely related degree from a regionally accredited community college and matriculate to complete the core and non-core courses recommended by FESHE.

STUDENT LEARNING OUTCOMES

| GENERAL EDUCATION REQUIREMENTS (37 Credits) SPECIAL PROGRA | | | | PROGRAM REQUIREMENTS CONTINUED | | | |
|--|--|---------------------------------|----------|--|--|------------------|----------|
| | | CR | SEMESTER | | | CR | SEMESTER |
| MATHEM MATH 12 | NATICS O or above (except MATH 122, 123) | 3 | | SELECT FT 126 | 15 CREDITS FROM THE FOLLOWING: | 3 | |
| ENGLISH | I COMPOSITION or 101 or 107 or 113, and ENG 333 | 6-8 | | FT 150 FT 151 FT 153 | Fire Investigation I Apparatus and Equipment Fire Protection Hydraulics and Water Supply Occupational Safety and Health for Emergency Services | 3 3 3 | |
| | NICATIONS and COM 101 | 6 | | FT 190 FT 191 FT 226 | Fire Instructor I Intro to Company Officer Fire Investigation II | 3 3 3 | |
| HMS 130 | RELATIONS ; MGT 283; PSC 201; PSY 101, 102, | 3 | | FT 243 PLUS 42 | Strategy and Tactics CREDITS FROM THE FOLLOWING: | 3 | |
| NATURA | 261; SOC 101, 102, 202, 205, 275 L SCIENCE EM; ENV; GEOG 103, 104, 117, HYS | 6 | | FT 300 FT 301 FT 302 FT 303 | Fire Dynamics Political and Legal Foundations for Fire Protection Fire and Emergency Services Administration Personnel Management for Fire | 3 3 3 | |
| PHIL 302 following ECON; EI | TS/HUMANITIES/ SOCIAL SCIENCES and PHIL 311 and one of the 1: AM; ANTH; ART; COM; DAN 101; NG 223 or above; GEOG 106 or above, | 9 | | FT 304 FT 305 FT 306 | and Emergency Services Fire Prevention Organization and Management Managerial Issues in Hazardous Materials Financial Management for Fire and Emergency Services | 3 3 3 | |
| PSC; PS\ <u>U.S. AND</u> PSC 101 | ernational Languages; Music; PHIL; Y; SOC; THTR; WMST 113 • NEVADA CONSTITUTIONS or and HIST 102 or | 4-6 | | FT 400 FT 401 FT 402 FT 403 FT 404 | Fire Investigation and Analysis Fire Protection Structures and Systems Fire Related Human Behavior Disaster Planning and Control Analytical Approaches to Public Fire Protection | 3 3 3 3 | |
| | and HIST 217 PROGRAM REQUIREMENTS (84 CREDI | TS) | | FT 405 FT 406 | Community Risk Reduction for Fire and Emergency Services Applications of Fire Research | 3 | |
| CORE RE | EQUIREMENTS (27 CREDITS) | CR | SEMESTER | | | | |
| FT 101 FT 105 FT 121 FT 125 FT 131 FT 152 FT 154 FT 224 FT 291 | Principles of Emergency Services Fire Behavior and Combustion Fire Prevention Building Construction for Fire Protection Hazardous Materials Chemistry Legal Aspects of Emergency Services Principles of Fire and Emergency Services Safety and Survival Fire Protection Systems Fire and Emergency Services Administration | 3 3 3 3 3 3 3 | | | | | |