ITEM 90-1601-R0396

Proposal to offer a Bachelor of Applied Science Degree at Western Montana College of The University of Montana and Montana Tech of The University of Montana

THAT:

The Board of Regents of Higher Education authorizes Western Montana College of The University of Montana and Montana Tech of The University of Montana to award a Bachelor of Applied Science Degree (BAS).

EXPLANATION:

Students earning an associate of applied science degree at two-year institutions and wishing to move into baccaluareate programs traditionally have to begin anew, necessitating an additional four years of study to complete a bachelor's degree. This degree, implemented in other states and institutions in the country, allows the transfer of the associate of applied science degree and credits toward the baccalaureate degree without loss of time or credit. The BAS program would require students complete all regular general education requirements, at least one year of upper division courses, at least one-half year of courses supporting the AAS degree field, and various other support requirements within a 120 credit BAS degree.

The BAS degree meets the Board of Regents objectives as set forth in Phases I and II of restructuring.

The degree is especially designed for individuals already in the workforce who hold an AAS degree and who need to obtain a Bachelor's degree.

ATTACHMENTS:

Program Proposal

BOARD OF REGENTS STATE OF MONTANA

PROPOSAL

TO INITIATE A NEW INSTRUCTIONAL PROGRAM

SUBMITTED BY:

Montana Tech of The University of Montana CAMPUS OF THE UNIVERSITY OF MONTANA

A NEW INSTRUCTIONAL PROGRAM LEADING TO:

Bachelor of Applied Science

August 1996
Proposed Starting Date

Campus Fiscal Officer Date Provost/VP Academic Affairs Date

Campus Chief Academic Officer Date

Campus Chief Executive Officer Date

Campus Chief Executive Officer Date

President

Date

BOARD OF REGENTS STATE OF MONTANA

PROPOSAL TO INITIATE A NEW INSTRUCTIONAL PROGRAM

SUBMITTED BY:

WESTERN MONTANA COLLEGE OF THE UNIVERSITY OF MONTANA Institution Submitting Proposal

A NEW INSTRUCTIONAL PROGRAM LEADING TO:

Bachelor of Applied Science

<u>Fall Semester 1996</u> Proposed Starting Date

THIS PROPOSAL HAS BEEN APPROVED BY:

Dand A Beier	2/27/96	Part Link	: c/22/4
Campus Chief Academic Officer	Date	ProvostVP Academic Affairs	Date
Hey Odsayt	2/27/96	James & Jord	3/1/96
Campus Fiscal Officer	Date	VP Administration and Finance	Date
Theila M. Stearn	a 2-27-96		
Campus Chief Executive Officer	Date	President	Date

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I. EXPECTED PROGRAM CONTRIBUTIONS

- A. <u>Mission</u>. The University of Montana offers Associate occupational or technical and baccalaureate programs. The Bachelor of Applied Sciences degree program articulates these two existing program efforts. The effort is in keeping with restructuring objectives of the Montana University System.
- B. Need for the Program. Consistent with the objectives of restructuring the Montana University System, the BAS degree program addresses a number of standing issues and needs. One of the most discussed relates to transfer, specifically the applying of course work from a two-year occupational or technical program to a four-year baccalaureate program. The general public, students, and political leaders have been critical of the lack of program articulation generally, and specifically between the occupational or technical and baccalaureate program areas. This criticism is exacerbated by the knowledge that opportunities for such program articulation exist in other states, some of which are adjacent to Montana. Sentiment is that there should be a comparable opportunity in Montana. Further, it is the general feeling by most that such a program articulation opportunity should be available to avoid "dead ending" Montana citizens in their academic and career pursuits. An educational experience should open, not close, doors of opportunity. This Notice of Intent is forwarded to address the aforementioned issues and needs.

The number of students this degree might attract is difficult to predict. Discussions with representatives from two other institutions (Idaho State University and Boise State University) having similar degree programs suggest the degree should be a "popular" one. It is estimated that maximum enrollment would not be realized until several years after program implementation.

C. Relationship to Other Programs on Campus. The BAS degree is designed to couple the specialized technical coursework of an Associate of Applied Science degree program with baccalaureate degree program requirements at each campus. It enhances the technical area of the Associate of Applied Science program and is tailored to individual needs of students. Courses which lead to the BAS degree will be selected from existing course offerings. The BAS degree program will be a customized degree program filling individual identified needs. The BAS degree program concept is career oriented, nontraditional, and flexible, assuring the maximum use of the technical education investment by the individual and existing academic offerings at the campuses.

II. PROGRAM DESCRIPTION

- A. Goals and Objectives. The BAS degree program provides opportunities for individuals who are planning to enter, have already entered, or have completed Associate of Applied Science degree programs and need additional educational preparation to strengthen planned or previous training and improve career advancement opportunities.
- B. <u>Curriculum</u>. The BAS degree program concept is similar to that adopted by other higher education institutions to provide similar degree opportunities. Brief reference is being given to selected baccalaureate degree programs that are articulated with Associate of Applied Science degree programs. The objective of this reference is to "get a sense" of how the broader higher education community is viewing this degree/program relationship. Identification of institutions having such programs was selective. Their approach to degree program design is representative of the total higher education community. The following table presents a comparison of degree requirements and includes the following referenced institutions:

Boise State University - BSU
Idaho State University - ISU
University of Texas-Tyler - UTT
West Texas State University - WTSU
Montana Tech of the University of Montana - MTUM
Western Montana College of The University of Montana - WMC-UM
Laddered Applied Associate/Baccalaureate Degree Comparisons

			Baccalaureate Credit Requirements				
Institution	Degree	AAS Cr	Total	Gen Ed	Support	Other	Upper Div
BSU	BAS	64	64	42	12	9	22
ISU	BAT	50	78	39-44	12		36
UTT	BAAS	60	70*	21	18	31*	49*
WTSU	BAAS	48	76	35-37	18-24	15-23	30
MTUM	BAS	42-60	60	29	18-20	9-21	39
WMC-UM	BAS	60	60	30-32	18	10-12	30

^{*}Based on an assumed 130 credit BAS degree requirement

As can be noted from the information presented for comparison, all referenced programs contain similar, if not the same, degree requirement considerations; the difference results from the emphasis given these requirements. These comparisons reflect what is valued by each institution.

The BAS program will take advantage of existing course offerings. The degree program requires completion of a minimum of 60 resident credits beyond the Associate of Applied Science degree. A maximum of 60 credits will be accepted from AAS programs towards the 120-credit degree total. The additional academic coursework must include completion of specified general education and credits that relate to and are supportive of student needs and the Associate of Applied Science degree program. The degree will include a minimum of 30 credits of upper-division courses.

Courses that are supportive of student needs and enhance the AAS degree program are dependent on the approved degree plans for each campus and must total the approximate 18 support credits previously referenced in the table. The contract degree plan will be reviewed and approved within the structure approved and specified by each campus.

- C. <u>Faculty</u>. The BAS degree program is comprised of existing course offerings. Because existing offerings are being used, new faculty will not be required. Faculty qualifications, numbers, teaching loads, etc. are not issues with this proposal.
- D. <u>Students</u>. BAS degree program enrollments will not have significant impact on total campus enrollment until year three. The students will be dispersed across campus, adding one to two FTE in any one academic area at a time. Admission to the program requires the Associate of Applied Science degree program graduates to have a cumulative grade point average of 2.00 (the same as other transfer students).
- E. <u>Facilities and Support</u>. Faculty, facilities, equipment, library holdings, and support services that serve the needs of existing occupational/technical and baccalaureate programs will serve the needs of the BAS degree program.

III. PROGRAM QUALITY

A. <u>Accreditation</u>. The BAS degree program will be included under Northwest Association of Schools and Colleges, Commission on College's institutional accreditation for each campus. The addition of the BAS degree program to College offerings will be viewed as a minor substantive change or no change as outlined in the Commission "Accreditation Handbook." If considered a minor change, the Commission must be notified of the addition of this degree program. Assessment of the BAS degree program will include a review of entry level preparedness of students, student progress in the program, and alumni information. Student success in the BAS degree program will be tracked according to the student's entering GPA, AAS degree graduate program origin, and the selected course alternative. Information on student and employer follow-up surveys regarding alumni and employer satisfaction and graduate competence, as conducted by the institution awarding the AAS degree, will be requested. Assessment results will be used in the ongoing College program review process.

B. <u>Finances</u>. Cost to implement this degree program, as with most, is a function of student numbers. The number of students this degree might attract is extremely difficult to predict. It is felt that costs will be insignificant.

Because the BAS program involves both lower and upper division courses, students would not be concentrated in any one academic unit on campus. They would be spread across many academic units, thus justifying the use of average cost/expenditure figures to determine degree program costs. BAS students will be occupying seats in existing courses/sections rather than creating the demand for additional courses/sections. Hence, the presence of the BAS students will not add any substantial costs.

IV. BAS STRUCTURE FOR WMC-UM

Administration

Degree program oversight will be vested in a Bachelor of Applied Sciences Committee. Committee membership will be comprised of faculty representatives. The committee will assign each prospective BAS student an advisor appropriate to his/her field of academic interest. The advisor assigned will be chosen from a group of self-nominated faculty members who have expressed a sincere interest in the program and who have received training on the intent and the structure of the degree. The appointed advisor will assist the student in developing a degree plan which will be reviewed and approved by the BAS Committee.

Curriculum Structure

- 1. An Associate of Applied Science degree from a regionally accredited institution.
- Completion of at least 60 credits at WMC-UM including 30 credits in courses numbered 300-499.
- 3. Completion of general education requirements of WMC-UM. The general education component will be consistent with other degrees offered at WMC-UM. The completion of the general education core will vary because each student may transfer in different portions of and varying numbers of credits in general education, based on the respective AAS degree.
- 4. A support area of 18 credits including at least 12 credits numbered between 300 and 499 in one of the following areas:
 - a. Fine Arts and Humanities (music, drama, art, English, philosophy, foreign language, humanities)
 - b. Business (business, economics, computer science, tourism and recreation)
 - c. Health and Physical Education
 - d. Industrial Technology
 - e. Mathematics
 - f. Natural Science (biology, chemistry, geology, physics)
 - g. Social and Behavioral Science (history, geography, political science, anthropology, sociology, psychology)
 - h. Interdisciplinary (requires approval of BAS committee)

Summary

General Education - see #3 above	variable		
Support Area (specialized concentration			
developed with advisor) see #4 above	18 credits		
Electives	10-12 credits		
Transfer Credits (AAS degree) see #1 above	60 credits		
TOTAL	120 credits		

V. BAS STRUCTURE FOR MONTANA TECH OF THE UNIVERSITY OF MONTANA

The BAS program at Montana Tech of The University of Montana requires completion of the following:

 The general education core of all Bachelor degrees is required for BAS majors and must include:

Communications --- 6 credits
Mathematics --- 5/6 credits
Social Sciences --- 6 credits
Humanities --- 6 credits
Phys. & Life Sci. --- 6 credits

- 2. The designated tracks within business, information processing, technical writing, and biology each require a minimum of 39 upper division credits and 18-28 credits in the specified track support area. The support area credits may be counted towards the upper division credit total. If students have completed parts of the general education core in the AAS program, then additional credits would be required within each track.
- 3. The specific approved tracks are:

BUSINESS AREA TRACKS

- A) general education core 30 credits
- B) general education distributive 16 credits (in one or more of the general ed core fields)
- C) support credits in track 21
- D) AAS transfer 53 credits
- I. General Business 21 support credits from the following:

* required courses

ECON 255 Macroeconomics

ECON 256 Microeconomics

*BUS 215 Principles of Accounting II

MATH 132 or 331 -- statistics

BUS 320 or C.S. 461 -- computerized information systems

*BUS 331 Marketing

*BUS 341 Business Law

*BUS 351 Business Finance

*BUS 361 or BUS 365 -- introductory management

*TBD 366 Operations and Production Management

II. Management Technician - 21 support credits from the following:

BUS 214 Principles of Accounting I
BUS 215 Principles of Accounting II
ECON 255 or ECON 256
HSS 122 Public Speaking
*HSS 322 Group Dynamics
*HSS 328 Argumentation
*BUS 361 Management
C.S. 461 Systems Design Process (prereq. C.S. 142 and 210)
*TBD 344 Entrepreneurship and Technological Enterprise
Development I
*TBD 366 Operations and Production Management

III. Managerial Secretarial - 21 support credits from the following:

C.S. 141 Microcomputer Software
C.S. 142 Microcomputer Architecture

*BUS 215 Principles of Accounting II
C.S. 241 Spreadsheets
C.S. 242 Databases

*BUS 361 Management

*BUS 364 Personnel Management
C.S. 451 Networking (prereq. same as for C.S. 461)
C.S. 461 Systems Design Process (prereq. as above)
ENGL 391 Business and Professional Writing

*ENGL 347 Introduction to Desktop Publishing

*ENGL 425 Technical Report Writing

BIOLOGY TRACK

- A) general education core 30 credits
- B) physical science support 19 credits
- C) biology core 28 credits
- D) AAS transfer 43 credits

Physical Science Support Courses - 27 Credits (of which 8 are part of General Ed Core):

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PHYS 102 College Physics
PHYS 103 College Physics
CHEM 105 General Chemistry
CHEM 113 General Chem Lab I
CHEM 106 General Chemistry
CHEM 116 General Chem Lab II
CHEM 325 Organic Chemistry
CHEM 327 Organic Chem Lab
CHEM 326 Organic Chemistry
CHEM 328 Organic Chem Lab
CHEM 421 Biochemistry
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Biology Courses Required - 28 Credits

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BIOL 111 Cell Biology with Lab
BIOL 210 Microbiology
BIOL 119 Intro to Biol Literature
BIOL 310 Plant Ecology
BIOL 311 Animal Ecology
BIOL 300 Genetics
BIOL 400 Evolution
Seminar
Senior Thesis
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WRITING IN TECHNICAL PROFESSIONS TRACK

- A) general education core 30 credits
- B) writing course core 21 credits
- C) support credits in track 18 credits
- D) minimum AAS transfer 51 credits

Writing Courses Required of All Students - 21 Credits

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ENGL (or E.S.) 321 Sci/Tech Writing
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JOUR 315 Audio/Video Presentations

ENGL 391 Bus/Prof Writing

ENGL 347 Intro to Desktop Publishing

ENGL 405 Tech Editing

JOUR 410 Writing for Video

ENGL 425 Tech Rpt Writing

Technical Professions Support Courses Required - 18 Credits

Choose six credits from the following:

BUS 361 Management

BUS 362 Labor Rel & Coll Barq

E.S. 594 Industrial Leadership

HSS 322 Group Dynamics

HSS 372 Industrial Psychology

HSS 421 Public Relations

Choose six credits from the following:

BIOL 270 Bioethics

BUS 363 Business Ethics

HSS 207 Ethics

HSS 337 Professional Ethics

HSS 491 Symposium on Human Values

Choose six credits from the following:

HIST 442 History of Technology

HIST 443 History of Science

HSS 214 Mass Media

HSS 321 History of Public Address

HSS 429 Communication Theory

HSS 451 Public Administration

withdrawn (this page only)

INFORMATION PROCESSING TRACK

- A) general education core 30 credits
- B) required support credits 18 credits
- C) required computer science core 33 credits
- D) AAS transfer 39 credits

Required Support Credits - 18 Credits

- ENGL 321 Scientific and Technical Writing
- ENGL 391 Business and Professional Writing
- HSS 348 Philosophy of Science/
- E.S. 424 Industrial Graphics

plus

Choose one class from the following:

- MATH 105 College Algebra
- MATH 106 College Trig
- MATH 121 Analytic Geometry and Calculus
- MATH 122 Analytic Geometry and Calculus

plus

Choose one class from the following:

- MATH 117 Math for Business and Social Science
- MATH 132 Elem Statistics and Probability
- MATH 331 Intro to Statistical Methods

Computer Science Courses Required - 33 Credits

- C.S. 210 Intro to Computer Science I
- C.S. 211 Intro to Computer Science II
- C.S. 241 Spreadsheet Applications
- C.S. 242 Database Applications
- C.S. 320 Data Processing in COBAL
- C.S. 341 Accounting Info Systems
- C.S. 342 Command Lang., 4 GL & Oper. Sys.
- C.S. 440 Computer Architecture
- C.S. 451 Data Communication Systems and Networks
- C.S. 461 Systems Design Process
- C.S. 426 Independent Study in C.S.