**Document N: Course and Program Development:**

**IMPACT AND APPROVAL SIGNATURES**

See Course and Program Development Policy and Procedures [www.ubalt.edu/provost](http://www.ubalt.edu/provost) for instructions.

**SCHOOL:**
- [ ] LAW
- [ ] MSB
- [ ] CAS
- [ ] CPA

**CONTACT NAME:** Dennis Pitta

**PHONE:** x 4891

**DEPARTMENT/DIVISION:** Marketing & Entrepreneurship

**DATE PREPARED:** 4/5/11

**PROPOSED SEMESTER OF IMPLEMENTATION:**
- [ ] fall
- [ ] spring

**YEAR:** 2011

**TYPE OF ACTION:**
- [ ] add (new)
- [ ] deactivate
- [ ] modify
- [ ] other

**LEVEL OF ACTION:**
- [ ] noncredit
- [ ] undergraduate
- [ ] graduate
- [ ] other

**ACTION BEING REQUESTED** (select one category, either Course Actions or Program Actions):
- [ ] COURSE ACTIONS
- [ ] PROGRAM ACTIONS

**Original Subject Code/Course Number:**

**Original Course Title:**

**Original Program Title:**

- Post-Baccalaureate Certificate in Technology Commercialization and Innovation Management

Select one or multiple actions from one of the lists below (review the list of necessary documents and signatures):

**COURSE ACTIONS**
- 1. Experimental Course
- 2. Course Title
- 3. Course Credits
- 4. Course Number
- 5. Course Level
- 6. Pre- and Co-Requisite
- 7. Course Description
- 8. New Course
- 9. Deactivate Course
- 22. Other

**PROGRAM ACTIONS**
- ✓ 10. Program Requirements
- 11a. Undergraduate Specialization (24 credits or fewer)
- 11b. Master’s Specialization (12 credits or fewer)
- 11c. Doctoral Specialization (18 credits or fewer)
- 12. Minor (add or delete)
- 13. Closed Site Program
- 14. Program Suspension
- 15. Program Reactivation
- 16a. Certificate Program (UG/G) exclusively within existing degree program
- 16b. Certificate Program (UG/G) outside of or across degree programs (12 or more credits)
- 17. Off-Campus Delivery of Existing Programs
- 18a. Undergraduate Concentration (exceeds 24 credits)
- 18b. Master’s Concentration (exceeds 12 credits)
- 18c. Doctoral Concentration (exceeds 18 credits)
- 19. Program Title Change
- 20. Program Termination
- 21. New Degree Program
- 22. Other

**ADDITIONAL DOCUMENTATION** (check all appropriate boxes of documents included; review the list of necessary documents):
- [ ] summary proposal (O)
- [ ] course definition document (P)
- [ ] full five-page MHEC proposal (Q)
- [ ] financial tables (MHEC) (R)
- [ ] other documents as may be required by MHEC/USM (S)
- [ ] other (T)

Summer 2010
IMPACT REVIEW (review the list of necessary signatures):

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<td>D. Dean</td>
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<tr>
<td>E. University Faculty Senate (Chair)</td>
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<td>5/11/11</td>
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<td>F. University Council (Chair)</td>
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<tr>
<td>G. Provost and Senior Vice President for Academic Affairs</td>
<td></td>
<td>5/13/11</td>
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<tr>
<td>H. President</td>
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<td>6/13/11</td>
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<tr>
<td>J. Board of Regents (approval)</td>
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<td>K. MHEC (notification only)</td>
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<td>L. MHEC (approval)</td>
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</tr>
<tr>
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<td>Required only if the University’s mission is changed by the action</td>
<td>6/14/11</td>
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1 University Council review (for recommendation to the president or back to the provost) shall be limited to curricular or academic policy issues that may potentially affect the University’s mission and strategic planning, or have a significant impact on the generation or allocation of its financial resources.
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Document O: Course and Program Development: SUMMARY PROPOSAL

See Course and Program Development Policy and Procedures (www.ubalt.edu/provost) for instructions.

SCHOOL:  ○ LAW  ○ MSB  ○ CAS  ○ CPA

CONTACT NAME: Dennis Pitta  PHONE: x4891

DEPARTMENT/DIVISION: Marketing & Entrepreneurship  DATE PREPARED: 4/5/11

PROPOSED SEMESTER OF IMPLEMENTATION:  ○ fall  ○ spring  YEAR: 2011 - 2012

ACTION BEING REQUESTED (select one category, either Course Actions or Program Actions):

○ COURSE ACTIONS  ○ PROGRAM ACTIONS

Original Subject Code/Course Number:

Original Program Title:

Select one or multiple actions from one of the lists below (review the list of necessary documents and signatures):

<table>
<thead>
<tr>
<th>COURSE ACTIONS</th>
<th>PROGRAM ACTIONS</th>
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<tbody>
<tr>
<td>1. Experimental Course</td>
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<td>2. Course Title</td>
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<td>10. Other</td>
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</tbody>
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For changes to existing courses:

OLD TITLE

NEW TITLE

SUBJECT CODE/COURSE NO.

CREDITS

SUBJECT CODE/COURSE NO.

CREDITS
DESCRIBE THE REQUESTED COURSE/PROGRAM ACTION (additional pages may be attached if necessary):

The certificate consists of four courses that are already offered:

MGMT 760 - Organization Creation and Innovation
MKTG 762 - Opportunity Analysis
ENTR 797 – Special Topics (Resource Acquisition for Technology Ventures)
ENTR 795 - Entrepreneurship Practicum.

SET FORTH THE RATIONALE FOR THIS PROPOSAL:

There is significant market potential for a certificate that provides entrepreneurial skills to the general public. Scientists and engineers, many of whom have advanced degrees, would find the specialized skills that the certificate provides to be valuable.
Impact Statement From the Office of University Relations

Please be advised that any programmatic changes are likely to affect recruitment and other publications produced and/or managed by the Office of University Relations that contain this type of specific academic information. Please inform Catherine Leidemer (cleidemer@ubalt.edu or 410.837.6164) of any proposed changes that receive final approval and of any planned implementation timelines.

The timing of the final approval for these changes will be a determining factor in our ability to incorporate the new information in a timely fashion in any relevant materials that are on our production schedule. As a general guideline, the Office of University Relations should be notified of any programmatic changes to a scheduled recruitment publication at least two months prior to printing.
Offices of Admission - Impact Statement
May 10, 2011

New Instructional Program:  Post-Baccalaureate Certificate in Technology Commercialization and Innovation Management

Proposed Semester of Implementation Fall 2011

The program proposal outlined in the attached document will have a significant impact on the Offices of Admission.

- While we have not completed (or seen) research to assess the demand for such a program among, we believe that the program proposed will increase the University’s attractiveness and consequently enrollment numbers over the long term. However, we do not project any enrollment for the Fall 2011 semester. Given the timing of this proposal, and the review period demanded by System and MHEC, we will be unable to announce market and recruit students in time for August classes.

- The graduate recruiting materials are currently in development for next year. Halting production to include the certificate once it is approved could negatively impact recruiting for all MSB certificate programs by slowing down the availability of marketing collateral for these programs.

- The website will need to be updated. The estimate for this work is 30-40 hours.

- The electronic application will require updating. This will impact EMSA Technology who is not listed as a signatory on this document.
PROPOSAL FOR

x  NEW INSTRUCTIONAL PROGRAM

___  SUBSTANTIAL EXPANSION/MAJOR MODIFICATION

___  COOPERATIVE DEGREE PROGRAM

University of Baltimore
Institution Submitting Proposal

Fall 2012
Projected Initiation Date

Post-Baccalaureate Certificate  Innovation Management & Technology Commercialization
Award to be offered  Title of Proposed Program

HEGIS 0506.11  CIP 52.0101
Suggested HEGIS Code  Suggested CIP Code

Marketing and Entrepreneurship  Dr. Dennis Pitta
Department of Proposed Program  Name of Department Head

Dennis Pitta  dpitta@ubalt.edu  410-837-4891
Contact Name  Contact E-mail address  Contact Phone Number

Signature and Date  President/Chief Executive Approval

Date Endorsed/Approved by Governing Board
Proposal for Post-Baccalaureate Certificate in Innovation Management and Technology Commercialization at the University of Baltimore

The University of Baltimore (UB) proposes to offer a Post Baccalaureate Certificate in Innovation Management and Technology Commercialization under the auspices of UB's Merrick School of Business M.S. in Innovation Management and Technology Commercialization (pending final approval). Each of the four courses for the certificate exists currently and will be offered under the M.S. degree program.

I. Rationale for the program.

The mission of the Merrick School of Business is to be a leader in business education in the mid Atlantic region, based on a foundation of excellence in teaching, research and service: to foster life-long learning for mature, upper-division and graduate level students; to provide knowledge and professional skills in the functional areas of business emphasizing information and technology, international business, and innovation and entrepreneurship in a dynamic, global environment.

The proposed certificate program fulfills UB's mission. It promotes an interdisciplinary approach to teaching and learning in its emphasis on the interdependency of the fields of business that comprise UB's entrepreneurship curriculum. The proposed program fosters life-long learning among those nontraditional-age students who want to focus on innovation management and technology commercialization in a graduate program, as well as those who have already launched a career and want to enhance it or learn how to market their own original idea or product. It particularly speaks to UB's mission to provide knowledge and professional skills in innovation and entrepreneurship.

The program is intended to appeal to scientists, engineers, and managers working in technology oriented ventures and to a lesser extent, currently enrolled graduate students, as well as the professional community at large. It is anticipated that students will come from diverse backgrounds, including business, law, engineering, the sciences and the liberal arts. The program will provide students with knowledge of technology trends in such areas as biotechnology, information technology, and engineering as well as a solid background in the lab-to-market process.

The proposed program is designed specifically for workforce education and training and is targeted to technology, health and other areas of entrepreneurial interest. The program teaches students how to tap into emerging markets as individual entrepreneurs or business developers within Maryland companies. Moreover, the certificate fosters individual student learning in an applied environment.
II. Educational objectives of the program.

Professionals educated in the commercialization of technology and innovation management are critical to translating this wealth of research and development into new ventures and new employment and for fostering the growth of both entrepreneurial and entrepreneurial enterprises in the region. The proposed Post Baccalaureate Certificate in Innovation Management and Technology Commercialization offers to both traditional and nontraditional students the preparation necessary to become successful professionals in the area of technology commercialization and innovation management. It would train managers, entrepreneurs and decision-makers in the technology commercialization process.

III. Describe the program as it would appear in the catalog.

The Post Baccalaureate Certificate in Innovation Management and Technology Commercialization consists of four courses that provide the background to innovation and commercialization as well as a practicum to put the knowledge gained into practice.

Designing and developing a successful new invention, idea or discovery is every entrepreneur’s dream. From the Post-It Note to the Internet, inventive minds have given the world useful and exciting products. How did they take their discoveries to market? How did they turn ideas into reality? The requirements of successful technology commercialization extend far beyond the research that first created the concept, device or discovery, and beyond the engineering necessary for technology development. Technology commercialization requires a complex dovetailing of legal analysis, intellectual property strategy, market research financing and business planning. Effective commercialization strategies draw on expertise in operations, accounting and tax strategy. They frequently require the forging of alliances and networks within and outside organizations.

Offered under the auspices of the University of Baltimore Merrick School of Business M.S. in Innovation Management and Technology Commercialization (pending final approval), the Post Baccalaureate Certificate in Innovation Management and Technology Commercialization is offered to those who want to learn this complex process of bringing new products, ideas and discoveries to market. The program welcomes entrepreneurs, inventors, scientists, managers, engineers, attorneys, marketers, and graduate students in technology, science, engineering, law or business. A bachelor's degree and approval of the program director are required to enter the program. The program leading to the certificate in Innovation Management and Technology Commercialization consists of 12 credits in four courses covering various aspects of innovation management and technology commercialization, ranging from organizational creativity and innovation to opportunity analysis and resource acquisition. Courses in the certificate program may be offered in both face-to-face and online formats.

Students will participate in every stage of the lab to market innovation process. Assignments offer a learn-by-doing experience, from learning the theories behind successful entrepreneurship or product development to actually writing a business plan and raising capital for a new venture. A highly interactive environment in class encourages learning from the strengths, ideas, and suggestions of others. The material is aimed at motivated laypersons regardless of background or chosen profession.
Each course is a building block in the structure needed to successfully commercialize an idea, new product or invention. All courses are based on team learning, and active participation is expected from each enrollee. Each class explores the similarities and differences between entrepreneurship and innovation, and ties the central concepts learned to each method of commercialization.

IV. List the courses.

Each of the courses already exists within the M.S. in Innovation Management and Technology Commercialization (pending final approval) program. They include:

MGMT 760 – Organizational Creativity and Innovation
MKTG 762 – Market Opportunity Analysis
ENTR 797 – Special topics: Resource Acquisition for Technology Ventures  (Course has been accepted as a permanent course. Special topics are ad hoc course offerings. The new designation is: IMTC 791 Resource Acquisition for Technology Ventures- content remains unchanged)
ENTR 795 – Entrepreneurship Practicum.

As the new M.S. in Innovation Management and Technology Commercialization design evolved, the changes noted above fit more closely with the M.S. program objectives.

**MGMT 760 - Organizational Creativity and Innovation** (3 credits). This course focuses on strategy and techniques for successfully leading intrapreneurship and innovation in organizations. It covers the role of power, influence and communication in the change process, confrontation and effective intervention, concepts and techniques of organizational development, frameworks for creativity and acceptance of innovation. Included are individual and group research and experiential exercises. Prerequisite: MGMT 600.

**MKTG 762 - Market Opportunity Analysis** (3 credits). This course introduces the subject of opportunity analysis in marketing, intrapreneurship and entrepreneurship and the practice of their requisite skills. Includes the analysis of markets, competition, preliminary cost feasibility and intellectual property and also involves the creation and development of strategic positioning appropriate to the marketing opportunity.

**IMTC 791 - Resource Acquisition for Technology Ventures** (3 credits). This special topics course will concentrate on the following specific topics. Resource acquisition: bootstrapping, 3Fs, angels, venture capital. Organizing—modes of exploitation (strategic alliances, corporate venturing). Valuation, licenses, SBIR, CRADA, ROI, NPV, IRR, payback period. Licensing agreements, Government assistance, Structuring the deal, Negotiating the deal.

**ENTR 795 – Entrepreneurship Practicum** (3 credits). This course provides students an opportunity to work with a new company or product/service division on a real-life entrepreneurship project. Students work in consulting teams composed of teammates with varying specializations and interests. Projects may deal with market analyses, feasibility studies, distribution analyses or a variety of other specific company needs. Prerequisite: Permission of instructor.
V. Expected student learning outcomes.

The proposed post-baccalaureate Certificate in Innovation Management and Technology Commercialization offers to both traditional and nontraditional students the preparation necessary to become successful professionals in the area of technology transfer. Upon the completion of this certificate, successful students will be able to:

1. Assess the viability of various technologies;
2. Identify commercially viable technology-oriented products, services, or processes;
3. Analyze markets for technology-oriented products, services, or processes;
4. Develop viable technology commercialization and innovation management strategies, and;
5. Identify and obtain the resources required to commercialize technology or manage innovation.

VI. Faculty Resources

It is anticipated that the certificate can be delivered with existing faculty:

Michael Laric, Ph.D., Professor of Marketing, Merrick School of Business, University of Baltimore

David Lingelbach, Ph.D., Assistant Professor of Entrepreneurship, Merrick School of Business, University of Baltimore

John C. Weiss, Lecturer in Entrepreneurship, Merrick School of Business, University of Baltimore

Various expert guest lecturers from business, industry, government and medicine will contribute to each of the following three courses: MGMT 760; MKTG 762; IMTC 791.
June 14, 2011

Dr. Robert Bogomolny  
President  
University of Baltimore  
1420 N. Charles St., AC 249  
Baltimore, Maryland 21201

Dear Bob:

Thank you for forwarding the request from University of Baltimore, to offer three new Post Baccalaureate Certificates:

1. Post Baccalaureate Certificate in Library Technologies
2. Post Baccalaureate Certificate in Digital Communication
3. Post Baccalaureate Certificate in Technology Commercialization

I am pleased to approve this recommendation. Please express my appreciation to departmental faculty for their careful work in making this decision.

Sincerely,

William E. Kirwan  
Chancellor

cc: Dr. Irwin Goldstein  
Ms. Theresa Hollander  
✓Dr. Joseph S. Wood, Provost and Senior Vice President for Academic Affairs
March 23, 2012

Dr. Joseph Wood
Provost and Senior Vice President
for Academic Affairs
University of Baltimore
1420 N. Charles Street
Baltimore, MD 21201

Dear Dr. Wood:

The Maryland Higher Education Commission has reviewed a request from the University of Baltimore to offer a new Post-Baccalaureate Certificate (P.B.C.) program in Innovation Management and Technology Commercialization within the existing Master of Science (M.S.) in Innovation Management and Technology Commercialization degree. I am pleased to inform you that the program has been administratively approved. This decision was based on an analysis of the program in conjunction with the Maryland Higher Education Commission’s Policies and Procedures for Academic Program Proposals and the Maryland State Plan for Postsecondary Education. The program demonstrates potential for success, an essential factor in making this decision.

For purposes of providing enrollment and degree data to the Commission, please use the following HEGIS and CIP codes:

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Should the program require any substantial changes in the future, please keep the Commission apprised. I wish you continued success.

Sincerely,

Danette G. Howard, Ph.D.
Interim Secretary of Higher Education

DGH:SAB:ggs

C: Ms. Theresa W. Hollander, Associate Vice Chancellor for Academic Affairs, USM
May 7, 2012

MEMORANDUM

TO: Dr. Beverly Schneller
    Associate Provost

SUBJECT: Post Baccalaureate Certificate

The Middle States Commission on Higher Education has received your inquiry concerning the inclusion of the post-baccalaureate certificate program in Innovation Management and Technology Commercialization which will be offered within the existing Master of Science (M.S.) in Innovation Management and Technology Commercialization degree. You have requested that the post-baccalaureate certificate be included within the scope of the University of Baltimore’s institutional accreditation.

You have demonstrated that the certificate program is a subset of an existing degree program, and that the University of Baltimore has received approval from the Maryland Higher Education Commission (MHEC) for the offering. Based on this information, the Commission on Higher Education concludes that the post-baccalaureate certificate program in Innovation Management and Technology Commercialization does not represent a substantive change. No additional review or approval will be required from the Commission on Higher Education at this time, and the certificate program will be included within the scope of the institution’s accreditation.

Let me know if you have any additional questions about this matter, or if I might provide further assistance. Please accept my best wishes for success with this new certificate program.

Tito Guerrero, III
Vice President