

1. Degree to be Awarded: M.S. in Management - Acquisition and Contract Management

1a. Site Locations Proposed: Aberdeen, Patuxent

2. Area of Specialization: Acquisition and Contract Management

3. Purpose or Objective: The goal of the Master of Science in Management - Acquisition and Contract Management is to prepare individuals for advanced leadership and management positions in the private, public and military sectors with specific skills and competencies in Acquisition and Contract Management.

4. Specific Academic Content:

Program Prerequisite

MTH 1701 College Algebra

Required Courses (Complete all 8 courses):

MGT 5000 Financial Accounting

MGT 5002 Corporate Finance

MGT 5011 Management Theory and Thought

MGT 5013 Organizational Behavior

MGT 5020 Applied Management Project*

MGT 5033 Human Resources Management

MGT 5101 Leadership Theory and Effective Management

MGT 5106 Organizational Communication

* Serves as the Capstone course for this program

Electives (Select 3 courses):

MGT 5084 Materiel Acquisition Management

MGT 5211 Procurement and Contract Management

MGT 5212 Advanced Procurement and Contract Management

MGT 5213 Contract Changes, Terminations and Disputes

MGT 5214 Cost Principles, Effectiveness and Control

MGT 5217 Contract and Subcontract Formulation

MGT 5218 Contract Negotiations and Incentive Contracts

MGT 5231 Government Contract Law

MGT 5240 Business and Legal Aspects of Intellectual Property

MGT 5270 Special Topics in Contracts Management

Total Credits Required: 33

5. Quality of the proposed program in comparison to existing programs

FIT Aberdeen and Patuxent sites presently offer the MS in Acquisition and Contract Management (ACM). This is a terminal degree program for career specialists in the field, and is sought by government Contract Specialists in particular. Both military installations have large contracting functions needing specialized knowledge. CECOM in Aberdeen and NAVAIR at Patuxent River are each responsible for multi-billion dollar budgets of annual procurements for Army and Navy defense systems, respectively.

The MS in Management with concentration in ACM is a management degree, and is geared more toward program managers who, through the course of their work, are involved in acquisition activities of defense systems or subsystems. They could be in engineering and technology, logistics, or even business and finance but their work involves contracted products and services. The knowledge gained from the concentration in ACM enables these students to better understand the intricacies of contracting policies and processes which increases their overall management effectiveness.

According to the MHEC publication, *Trends in Degrees and Certificates by Program 2001-2014*, February 2015, there is no program duplication as no Maryland institution offers either the MS in Acquisition and Contract Management or MS in Management with an ACM concentration. Two state institutions show enrollments in Post-Baccalaureate Certificates that have related titles:

Post-Baccalaureate Certificate	Institution	5yr Avg Cert's*
Public Sector Finance & Acquisition	University of Maryland College Park	12
Acquisition & Supply Chain Management	University of MD University College	24

* Average Certificates Awarded 2010-2014

Neither post-baccalaureate certificate addresses the specific learning goals and objectives of the proposed MS in Management – Acquisition and Contract Management. In terms of quality and value, Florida Tech's traditional face-to-face classroom delivery at the specific military locations where students work and live is a unique and distinguishing factor.

6. Market Analysis

Steady market demand for this concentration is first demonstrated by the experience offering this program and the related MS in Acquisition and Contract Management at other FIT Extended Studies sites. Below are graduation statistics for the last four fiscal years (covering Summer & Fall semesters for the previous year, and Spring semester of the current year). Military personnel who transfer duty stations during the course of their careers are included in these graduation statistics.

Program	2011-2012	2012-2013	2013-2014	2014-2015	4yr Avg Graduates
MS in Management – Acquisition and Contract Management	45	50	42	28	41
MS in Acquisition and Contract Management	76	89	62	64	73

Source: Florida Institute of Technology, Office of Institutional Research
<http://www.fit.edu/oir/>

As previously stated, the MS in Acquisition and Contract Management is currently offered at both FIT Aberdeen and Patuxent sites. Program graduates from these sites also included in these statistics. With the continued growth of contracting and procurement responsibilities of CECOM and NAVAIR, each employing hundreds of contract specialists, graduation levels are expected to remain steady. By offering an ACM concentration in the MS in Management program provides further opportunities for program managers outside the contracts function with expanded duties involving contracted products and services.

7. The State's equal educational opportunity obligations under State and federal law

Florida Tech strongly and completely supports equal educational opportunity obligations under Maryland state and federal law. The following is the FIT policy statement: Notice of Nondiscrimination/Affirmative Action

Florida Tech, a private educational institution, is committed to the principle of equal opportunity for all qualified persons, welcomes students of all backgrounds and takes pride in the diversity of its faculty and staff. It assures students of access to all the privileges, programs and activities generally accorded and made available to the university.

Florida Tech strongly supports affirmative action principles and does not discriminate on the basis of creed, religion, national origin or ancestry, age, race, color, marital status, Vietnam-era veteran status, gender, sexual orientation or disability in the administration of its educational programs, admissions policies, financial aid programs, athletics, co-curricular activities or other college administered programs. Any adverse action or personnel action or other act of discrimination, based on the above may be the basis for filing a complaint of discrimination. Any student, applicant for employment or employee at Florida Tech, who believes that he or she has been discriminated against, may file a complaint of discrimination.

In addition, the out-of-State institution shall demonstrate that the proposed program, for which the institution is making application:

1. Meets a critical and compelling regional or Statewide need

Previous Base Realignment and Closure (BRAC) decisions have affected both Aberdeen Proving Ground and NAS Patuxent River, significantly expanding missions and capabilities,

and bringing thousands of jobs to both Maryland installations. According to a recent statewide study, both installations rank 2nd (behind Fort George G. Meade) in important state economic indicators:

- Aberdeen Proving Ground, total employment 46,583 (2nd), output \$6.2 billion, wages \$3.1 billion (2nd)
- NAS Patuxent River, total employment 36,956, output \$7.5 billion (2nd), wages \$2.4 billion

Source: *Economic Impacts of Maryland Military Installations: (FY12 Results)*, Figure 4, p9 of Maryland Military Installation Economic Impact Study published by the Regional Economic Studies Institute of Towson University for Maryland Department of Business & Economic Development,
<http://business.maryland.gov/Documents/ResearchDocument/MarylandMilitaryInstallationEconomicImpactStudy2015.pdf>

The largest portion of the output number listed above represents contracted products and services. Offering related MS programs in Acquisition and Contract Management is essential to maintaining and advancing a skilled workforce for two of the state's major employers.

2. Is consistent with the Maryland State Plan for Postsecondary Education

This request for a program area of concentration is consistent with the Maryland State Plan for Postsecondary Education 2013-2017 entitled *Maryland Ready* and its six overarching goals as follows:

- 1) Quality and Effectiveness – as previously discussed, FIT brings the same high quality of face-to-face, classroom instruction delivered by university-approved faculty in all programs of study. Recruitment and retention of faculty, as well as ongoing faculty development are top priorities at Aberdeen and Patuxent sites.
- 2) Access, Affordability, and Completion – FIT fully promotes access, affordability, and degree completion. Annual tuition increases have slowed significantly over the last 5 years. Further, tuition rates at all extended studies sites including Aberdeen and Patuxent are one-half the amount of the on-campus graduate tuition rate. For active duty military student in particular, FIT participates in the Yellow Ribbon Program, and has introduced the Wisdom Warrior program that reimburses students in uniform the full amount of their GI Bill threshold. In other words, active duty personnel pay \$250 per credit hour, their reimbursement threshold. Finally, degree completion is a major success measure at FIT. Both Aberdeen and Patuxent have dedicated site directors and administrators to assist local students in completing their degrees in a timely manner.
- 3) Diversity – as previously discussed, FIT is committed to the principle of equal opportunity for all qualified persons, welcomes students of all backgrounds and takes pride in the diversity of its faculty and staff. It assures students of access to all the

privileges, programs and activities generally accorded and made available to the university.

- 4) Innovation – FIT, a leading science and technology university, continually seeks innovative approaches in academic program design and delivery. Increased use of Canvas Infrastructure Learning Management System, Adobe Connect, and other instructional technology tools and aids enable a richer educational experience for students. Training on these tools is held during regular faculty meetings as part of faculty development.
- 5) Economic Growth and Vitality – FIT contributes to this goal through offering workforce-relevant programs of study. The proposed concentration areas in the MS Management program is an example. New program development enables students and employers to stay current and vital contributors to local economic growth.
- 6) Data Use and Distribution – FIT’s Office of Institutional Research provides university leaders, faculty and staff, state and federal constituencies with timely, easily accessible and accurate information to help create an academic learning environment and to enhance institutional effectiveness. See <http://www.fit.edu/oir/> for a wide selection of available data, metrics, and reports plus the ability to customize reports.

The out-of State institution shall clearly state the demand and need for a program, for which the institution is making application, in terms of meeting present and future needs of the region and the State in general. Two kinds of need may be identified:

- 1. Societal needs, including the tradition of liberal arts education, which provides immeasurable returns to the State in part by instilling in citizens a capacity for advanced learning and individual and societal benefits regardless of workforce or market demand considerations.**

While Florida Tech offers specialized workforce-relevant programs such as the areas of management concentrations proposed, there is broader societal and community benefit derived from students, alumni, and faculty participating in local non-profits, civic organizations, schools, and in other capacities. Florida Tech staff and alumni volunteer their time and talents, serve on local boards and commissions, and help further many causes to improve local quality of life. Most importantly, the deep roster of graduate alumni from four decades of program offering serves both as a strong community asset and indicator of the priority placed on advanced education in the two, fairly remote regions of Aberdeen and Patuxent River, MD.

- 2. Occupational needs relative to meeting workforce requirements or upgrading vocational or technical skills.**

Management Occupations, Business and Financial Operations Occupations - Maryland Occupational Projections - 2012-2022

Per <http://www.dllr.state.md.us/lmi/iandoproj/maryland.shtml> there is strong current employment in acquisition related management and business/financial operations occupations in Maryland, along with equally strong future employment projections through 2022. Highlighted for the ACM concentration in particular is *Occ Code 11-3061 Purchasing Managers*. As previously stated, the increased need for Government Contract Specialists and Program Managers involved in the acquisition process at both Aberdeen Proving Ground and NAS Patuxent River represents the primary demand for the ACM management concentrations. Again, there are no other state institutions offering the MS in Management with ACM concentration as proposed.

Occ Code	Occ Title	Employment 2012	Employment 2022	Employment Chg	Open ings Replac	Open ings New	Education Value	Work Value	Job Training Value
11-3031	Financial Managers	10,899	11,426	527	2,043	2,570	Bachelor's degree	5 yrs or more	None
11-3061	<i>Purchasing Managers</i>	1,657	1,674	17	364	381	<i>Bachelor's degree</i>	<i>5 yrs or more</i>	<i>None</i>
13-1111	Management Analysts	23,927	26,924	2,997	3,708	6,705	Bachelor's degree	Less than 5 years	None

1. Degree to be Awarded: M.S. in Management – Information Systems

1a. Site Locations Proposed: Aberdeen, Patuxent

2. Area of Specialization: Information Systems

3. Purpose or Objective: The goal of the Master of Science in Management - Information Systems is to prepare individuals for advanced leadership and management positions in the private, public and military sectors with specific skills and competencies in Information Systems Management.

4. Specific Academic Content:

Program Prerequisite
MTH 1701 College Algebra

Required Courses (Complete all 8 courses):
MGT 5000 Financial Accounting
MGT 5002 Corporate Finance
MGT 5011 Management Theory and Thought
MGT 5013 Organizational Behavior
MGT 5020 Applied Management Project*
MGT 5033 Human Resources Management
MGT 5101 Leadership Theory and Effective Management
MGT 5106 Organizational Communication
* Serves as the Capstone course for this program

Electives (Select 3 courses):
MGT 5070 Special Topics in Business
MGT 5150 Management of Software Systems
MGT 5151 Database Systems Management
MGT 5152 Computer Systems Administration
MGT 5153 Telecommunications Systems Management
MGT 5154 Advanced Management Information Systems

Total Credits Required: 33

5. Quality of the proposed program in comparison to existing programs

FIT Patuxent presently offers the MS in Computer Information Systems and MS in Computer Science. These are technical degree programs for career specialists in the field, and are sought by government civilian and military personnel along with support contractors involved in computer/information systems in particular. NAS Patuxent River, as well as

Aberdeen Proving Ground both have large information systems infrastructure needing specialized knowledge and expertise.

The MS in Management with concentration in Information Systems (IS) is a management degree, and is geared more toward program managers who, through the course of their work, are involved in information systems activities of defense systems/subsystems or computer system/network infrastructure. They could be in engineering and technology, logistics, or even business and finance but their work involves IS, whether done in house or through contracted services. The knowledge gained from the concentration in IS enables these students to better understand the intricacies of IS policies and processes which increases their overall management effectiveness.

6. Market Analysis

According to the MHEC publication, *Trends in Degrees and Certificates by Program 2001-2014*, February 2015 there is no MS in Management with a concentration in IS offered in Maryland. We have identified eight schools with related degrees but these are all direct programs of study, and some with a more technical scope than the proposed management concentration. Based on this analysis, there is no program duplication.

Institution	Master's Program	-----Graduates-----				
		2010	2011	2012	2013	2015
Bowie State University	Management Information Systems	19	24	20	20	22
Salisbury University	Geographic Information Systems Management	3	6	9	12	8
Towson University	Information Technology Management	0	0	0	0	0
UMD College Park	Information Management	70	61	32	29	43
UMUC	Computer Systems Management	55	42	21	5	1
Capitol Technology University	Information Systems Management	7	3	6	5	6
Goucher College	Information Services Management	0	0	0	0	0
Hood College	Management of Information Technology	1	3	4	4	7

In terms of quality and value, Florida Tech's traditional face-to-face classroom delivery at the specific military locations where students work and live is a unique and distinguishing factor.

Steady market demand for this concentration is first demonstrated by the experience offering this program at other FIT Extended Studies sites. Below are graduation statistics for the last four fiscal years (covering Summer & Fall semesters for the previous year, and

Spring semester of the current year). Military personnel who transfer duty stations during the course of their careers are included in these graduation statistics.

Program	2011-2012	2012-2013	2013-2014	2014-2015	4yr Avg Graduates
MS in Management – Information Systems	17	15	21	14	17

Source: Florida Institute of Technology, Office of Institutional Research
<http://www.fit.edu/oir/>

7. The State's equal educational opportunity obligations under State and federal law

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In addition, the out-of-State institution shall demonstrate that the proposed program, for which the institution is making application:

1. Meets a critical and compelling regional or Statewide need

Previous Base Realignment and Closure (BRAC) decisions have affected both Aberdeen Proving Ground and NAS Patuxent River, significantly expanding missions and capabilities, and bringing thousands of jobs to both Maryland installations. According to a recent statewide study, both installations rank 2nd (behind Fort George G. Meade) in important state economic indicators:

- Aberdeen Proving Ground, total employment 46,583 (2nd), output \$6.2 billion, wages \$3.1 billion (2nd)

- NAS Patuxent River, total employment 36,956, output \$7.5 billion (2nd), wages \$2.4 billion

Source: *Economic Impacts of Maryland Military Installations: (FY12 Results)*, Figure 4, p9 of Maryland Military Installation Economic Impact Study published by the Regional Economic Studies Institute of Towson University for Maryland Department of Business & Economic Development,
<http://business.maryland.gov/Documents/ResearchDocument/MarylandMilitaryInstallationEconomicImpactStudy2015.pdf>

The vast majority of high-tech, defense-related jobs involve information systems in one form or another, especially at Aberdeen and Patuxent installations where research, development, engineering, test and evaluation are core competencies. This management concentration is aimed at those who hold management responsibilities over some element of information systems.

2. Is consistent with the Maryland State Plan for Postsecondary Education

This request for a program area of concentration is consistent with the Maryland State Plan for Postsecondary Education 2013-2017 entitled *Maryland Ready* and its six overarching goals as follows:

- 1) Quality and Effectiveness – as previously discussed, FIT brings the same high quality of face-to-face, classroom instruction delivered by university-approved faculty in all programs of study. Recruitment and retention of faculty, as well as ongoing faculty development are top priorities at Aberdeen and Patuxent sites.
- 2) Access, Affordability, and Completion – FIT fully promotes access, affordability, and degree completion. Annual tuition increases have slowed significantly over the last 5 years. Further, tuition rates at all extended studies sites including Aberdeen and Patuxent are one-half the amount of the on-campus graduate tuition rate. For active duty military student in particular, FIT participates in the Yellow Ribbon Program, and has introduced the Wisdom Warrior program that reimburses students in uniform the full amount of their GI Bill threshold. In other words, active duty personnel pay \$250 per credit hour, their reimbursement threshold. Finally, degree completion is a major success measure at FIT. Both Aberdeen and Patuxent have dedicated site directors and administrators to assist local students in completing their degrees in a timely manner.
- 3) Diversity – as previously discussed, FIT is committed to the principle of equal opportunity for all qualified persons, welcomes students of all backgrounds and takes pride in the diversity of its faculty and staff. It assures students of access to all the privileges, programs and activities generally accorded and made available to the university.
- 4) Innovation – FIT, a leading science and technology university, continually seeks innovative approaches in academic program design and delivery. Increased use of Canvas Infrastructure Learning Management System, Adobe Connect, and other

instructional technology tools and aids enable a richer educational experience for students. Training on these tools is held during regular faculty meetings as part of faculty development.

- 5) Economic Growth and Vitality – FIT contributes to this goal through offering workforce-relevant programs of study. The proposed concentration areas in the MS Management program is an example. New program development enables students and employers to stay current and vital contributors to local economic growth.
- 6) Data Use and Distribution – FIT’s Office of Institutional Research provides university leaders, faculty and staff, state and federal constituencies with timely, easily accessible and accurate information to help create an academic learning environment and to enhance institutional effectiveness. See <http://www.fit.edu/oir/> for a wide selection of available data, metrics, and reports plus the ability to customize reports.

The out-of State institution shall clearly state the demand and need for a program, for which the institution is making application, in terms of meeting present and future needs of the region and the State in general. Two kinds of need may be identified:

- 1. Societal needs, including the tradition of liberal arts education, which provides immeasurable returns to the State in part by instilling in citizens a capacity for advanced learning and individual and societal benefits regardless of workforce or market demand considerations.**

While Florida Tech offers specialized workforce-relevant programs such as the areas of management concentrations proposed, there is broader societal and community benefit derived from students, alumni, and faculty participating in local non-profits, civic organizations, schools, and in other capacities. Florida Tech staff and alumni volunteer their time and talents, serve on local boards and commissions, and help further many causes to improve local quality of life. Most importantly, the deep roster of graduate alumni from four decades of program offering serves both as a strong community asset and indicator of the priority placed on advanced education in the two, fairly remote regions of Aberdeen and Patuxent River, MD.

- 2. Occupational needs relative to meeting workforce requirements or upgrading vocational or technical skills.**

Management Occupations - Maryland Occupational Projections - 2012-2022

Per <http://www.dllr.maryland.gov/lmi/iandoproj/ocgroup11.shtml> there is strong current employment in a wide range of management occupations in Maryland, along with equally strong future employment projections through 2022. As previously stated, the increased need for managers familiar with information systems capabilities at both Aberdeen Proving Ground and NAS Patuxent River represents the primary demand for the MS in Management with Information Systems concentration as proposed.

Occ Code	Occ Title	Employment 2012	Employment 2022	Employment Chg	Open ings Replac	Open ings New	Education Value	Work Value	Job Training Value
11-3021	Computer and Information Systems Managers	10,671	12,245	1,574	1,483	3,057	Bachelor's degree	5 yrs or more	None

1. Degree to be Awarded: M.S. in Management – Logistics Management

1a. Site Location Proposed: Aberdeen

2. Area of Specialization: Logistics Management

3. Purpose or Objective: The goal of the Master of Science in Management - Logistics Management is to prepare individuals for advanced leadership and management positions in the private, public and military sectors with specific skills and competencies in Logistics Management.

4. Specific Academic Content:

Program Prerequisite
MTH 1701 College Algebra

Required Courses (Complete all 8 courses):

MGT 5000 Financial Accounting
MGT 5002 Corporate Finance
MGT 5011 Management Theory and Thought
MGT 5013 Organizational Behavior
MGT 5020 Applied Management Project*
MGT 5033 Human Resources Management
MGT 5101 Leadership Theory and Effective Management
MGT 5106 Organizational Communication
* Serves as the Capstone course for this program

Electives (Select 3 courses):

MGT 5024 Production and Operations Management
MGT 5060 Management of Assets
MGT 5061 Systems and Logistics Support Management
MGT 5064 Cost and Economic Analysis
MGT 5065 Supply Chain Management
MGT 5066 Systems Analysis and Modeling
MGT 5069 Advanced Techniques in Supply Chain Management
MGT 5070 Special Topics in Business
MGT 5084 Materiel Acquisition Management
MGT 5100 Distribution Management
MGT 5211 Procurement and Contract Management

Total Credits Required: 33

5. Quality of the proposed program in comparison to existing programs

FIT Aberdeen and Patuxent sites presently offer the MS in Logistics Management (LM). This is a program for career specialists in the field, and is sought by government civilian and military personnel along with support contractors involved in logistics and system life cycle management in particular. NAS Patuxent River, as well as Aberdeen Proving Ground both have command-wide logistics management responsibilities needing specialized knowledge and expertise.

The MS in Management with concentration in LM is a management degree, and is geared more toward program managers who, through the course of their work, are involved in logistics management activities of defense systems or subsystems. They could be in engineering and technology, acquisition, or even business and finance but their work involves logistics management. The knowledge gained from this concentration enables these students to better understand the intricacies of logistics management policies and processes which increases their overall management effectiveness.

According to the MHEC publication, *Trends in Degrees and Certificates by Program 2001-2014*, February 2015, no Maryland institution offers either the MS in Logistics Management or MS in Management with a LM concentration. One institution in the state shows 1 enrollment in a Post-Baccalaureate Certificate with a related title, but since this is a certificate program, there is no program duplication.

Post-Baccalaureate Certificate	Institution	2014 Cert
Logistics & Supply Chain Management	Mount St. Mary's University	1

In terms of quality and value, Florida Tech's traditional face-to-face classroom delivery at the specific military locations where students work and live is a unique and distinguishing factor.

6. Market Analysis

Steady market demand for this concentration is first demonstrated by the experience offering this program and the related MS in Logistics Management at these and other FIT Extended Studies sites. Below are graduation statistics for the last four fiscal years (covering Summer & Fall semesters for the previous year, and Spring semester of the current year). Military personnel who transfer duty stations during the course of their careers are included in these graduation statistics.

Program	2011-2012	2012-2013	2013-2014	2014-2015	4yr Avg Graduates
MS in Management – Logistics Management	50	45	52	47	49
MS in Logistics Management	56	60	45	56	54

Source: Florida Institute of Technology, Office of Institutional Research
<http://www.fit.edu/oir/>

Note that the MS in Logistics Management is currently offered at both FIT Aberdeen and Patuxent sites. Program graduates from these sites also included in these statistics. With the continued growth of logistics responsibilities of CECOM and NAVAIR, each employing hundreds of logisticians, graduation levels are expected to remain steady. By offering a LM concentration in the MS in Management program provides further opportunities for program managers outside the contracts function with expanded duties involving contracted products and services.

7. The State's equal educational opportunity obligations under State and federal law

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In addition, the out-of-State institution shall demonstrate that the proposed program, for which the institution is making application:

1. Meets a critical and compelling regional or Statewide need

Previous Base Realignment and Closure (BRAC) decisions have affected Aberdeen Proving Ground, significantly expanding missions and capabilities, and bringing thousands of jobs to

the Maryland installation. According to a recent statewide study, APG rank 2nd (behind Fort George G. Meade) in important state economic indicators:

- Aberdeen Proving Ground, total employment 46,583 (2nd), output \$6.2 billion, wages \$3.1 billion (2nd)

Source: *Economic Impacts of Maryland Military Installations: (FY12 Results)*, Figure 4, p9 of Maryland Military Installation Economic Impact Study published by the Regional Economic Studies Institute of Towson University for Maryland Department of Business & Economic Development,
<http://business.maryland.gov/Documents/ResearchDocument/MarylandMilitaryInstallationEconomicImpactStudy2015.pdf>

A major consideration the continued occupational growth anticipated in the commercial logistics field in Maryland as major projects such as Dominion Cove Point Liquefied Natural Gas (LNG) Export Project are constructed in the next 5-10 years. The clustering effect that will occur as this multi-billion dollar project unfolds will require additional levels of logistics, transportation and supply chain jobs.

Another driver is an acute need to advance the anticipated upgraded academic skill levels of a large Army Logistics employee population at APG, affecting several hundreds of workers.

2. Is consistent with the Maryland State Plan for Postsecondary Education

This request for a program area of concentration is consistent with the Maryland State Plan for Postsecondary Education 2013-2017 entitled *Maryland Ready* and its six overarching goals as follows:

- 1) Quality and Effectiveness – as previously discussed, FIT brings the same high quality of face-to-face, classroom instruction delivered by university-approved faculty in all programs of study. Recruitment and retention of faculty, as well as ongoing faculty development are top priorities at the Aberdeen site.
- 2) Access, Affordability, and Completion – FIT fully promotes access, affordability, and degree completion. Annual tuition increases have slowed significantly over the last 5 years. Further, tuition rates at all extended studies sites including Aberdeen are one-half the amount of the on-campus graduate tuition rate. For active duty military student in particular, FIT participates in the Yellow Ribbon Program, and has introduced the Wisdom Warrior program that reimburses students in uniform the full amount of their GI Bill threshold. In other words, active duty personnel pay \$250 per credit hour, their reimbursement threshold. Finally, degree completion is a major success measure at FIT. The Aberdeen site has a dedicated site director and site administrators to assist local students in completing their degrees in a timely manner.
- 3) Diversity – as previously discussed, FIT is committed to the principle of equal opportunity for all qualified persons, welcomes students of all backgrounds and takes

pride in the diversity of its faculty and staff. It assures students of access to all the privileges, programs and activities generally accorded and made available to the university.

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- 5) Economic Growth and Vitality – FIT contributes to this goal through offering workforce-relevant programs of study. The proposed concentration areas in the MS Management program is an example. New program development enables students and employers to stay current and vital contributors to local economic growth.
- 6) Data Use and Distribution – FIT's Office of Institutional Research provides university leaders, faculty and staff, state and federal constituencies with timely, easily accessible and accurate information to help create an academic learning environment and to enhance institutional effectiveness. See <http://www.fit.edu/oir/> for a wide selection of available data, metrics, and reports plus the ability to customize reports.

The out-of State institution shall clearly state the demand and need for a program, for which the institution is making application, in terms of meeting present and future needs of the region and the State in general. Two kinds of need may be identified:

- 1. Societal needs, including the tradition of liberal arts education, which provides immeasurable returns to the State in part by instilling in citizens a capacity for advanced learning and individual and societal benefits regardless of workforce or market demand considerations.**

While Florida Tech offers specialized workforce-relevant programs such as the areas of management concentrations proposed, there is broader societal and community benefit derived from students, alumni, and faculty participating in local non-profits, civic organizations, schools, and in other capacities. Florida Tech staff and alumni volunteer their time and talents, serve on local boards and commissions, and help further many causes to improve local quality of life. Most importantly, the deep roster of graduate alumni from four decades of program offering serves both as a strong community asset and indicator of the priority placed on advanced education in the fairly remote region of Aberdeen, MD.

- 2. Occupational needs relative to meeting workforce requirements or upgrading vocational or technical skills.**

In the commercial field, the field of Logistics encompasses several important functions dealing with transportation and supply chain industries, with a focus on cargo handling; supply chain logistics management; airport, seaport, rail, and trucking operations; related technologies and security requirements. Maryland is expecting strong employment growth

in Transportation and Warehousing through 2022 as shown in the table below. While most of these jobs may not require college degrees, the increasing amount of specialized knowledge required for efficient lean operations methods places greater demands on effective management of these functions.

Industry Sector	2012	2022	Change	% Chg
All Transportation and Warehousing	86,429	92,857	6,428	7.4%
Transit and Ground Passenger Transportation	19,833	23,300	3,467	17.5%
Warehousing and Storage	11,548	14,812	3,264	28.3%

In terms of logistics management opportunities in particular, the following projections show significant growth, including areas of commercial interest such as online warehouse fulfillment centers. To repeat, there is no similar Logistics concentration graduate degree program available in Maryland.

Occ Code	Occ Title	Employment 2012	Employment 2022	Employment Chg	Openings Replac	Openings New	Education Value	Work Value	Job Training Value
11-3071	Transportation, Storage, and Dist. Managers	1,509	1,589	80	345	425	High school diploma or equivalent	5 yrs or more	None

Source: Maryland Department of Labor, Licensing and Regulation, Maryland Occupational Projections 2012 – 2022, Maryland Industry Projections
<http://www.dlrl.state.md.us/lmi/iandoproj/industry.shtml> (updated March 16, 2015)

Different than in the commercial field, a government Logistics Management Specialist focuses on planning, development, implementation and management of effective and affordable weapons, material, or information system support strategies during the acquisition and operational phases of the system's life cycle. The role as a logistician is an integral part of CECOM's capabilities to deliver and support weapon systems that are technologically superior and readily available to Army forces operating in harm's way across the globe.

The performance of this work requires the application of broad knowledge of a wide variety of logistics support activities. These include, but are not limited to the determination of detailed requirements, within available or allocated resources, for funds, manpower, facilities, equipment, supplies, and services; the design and development, procurement, production, storage, distribution, maintenance, transportation, utilization, and disposal of material; the procurement or design and construction, operation, maintenance, and disposal of facilities; the acquisition and training of personnel; and the acquisition or furnishing of such services as communications and those required to meet personnel needs.

1. Degree to be Awarded: M.S. in Management – Human Resources Management

1a. Site Location Proposed: Patuxent

2. Area of Specialization: Human Resources Management

3. Purpose or Objective: The goal of the Master of Science in Management – Human Resources Management is to prepare individuals for advanced leadership and management positions in the private, public and military sectors with specific skills and competencies in Human Resources Management.

4. Specific Academic Content:

Program Prerequisite
MTH 1701 College Algebra

Required Courses (Complete all 8 courses):

MGT 5000 Financial Accounting
MGT 5002 Corporate Finance
MGT 5011 Management Theory and Thought
MGT 5013 Organizational Behavior
MGT 5020 Applied Management Project*
MGT 5033 Human Resources Management
MGT 5101 Leadership Theory and Effective Management
MGT 5106 Organizational Communication
* Serves as the Capstone course for this program

Electives (Select 3 courses):

MGT 5016 Employee Relations
MGT 5021 Business Law
MGT 5070 Special Topics in Business
MGT 5105 Interpersonal Relations and Conflict Resolution
MGT 5138 Business Ethics

Total Credits Required: 33

5. Quality of the proposed program in comparison to existing programs

FIT Aberdeen and other Extended Studies sites presently offer the MS in Human Resources Management (HRM). This is a program for career specialists in the field, and is sought by government civilian and military personnel along with support contractors involved in human resources management in particular. NAS Patuxent River, as well as Aberdeen

Proving Ground are both large military installations with broad human resources management responsibilities needing specialized knowledge and expertise.

The MS in Management with concentration in HRM is a management degree, and is geared more toward program managers who, through the course of their work, are involved in HRM activities. They could be in engineering and technology, legal, or even program management but their work involves human resources management. The knowledge gained from this concentration enables these students to better understand the intricacies of human resources management policies and processes which increases their overall management effectiveness.

According to the MHEC publication, *Trends in Degrees and Certificates by Program 2001-2014*, February 2015 there is no MS in Management with a concentration in HRM offered in Maryland. We have identified two schools with related degrees but these are direct programs of study, and some with a development focus that is different than the proposed management concentration. Based on this analysis, there is little program duplication.

		-----Graduates-----				
Institution	Master's Program	2010	2011	2012	2013	2015
Towson University	Human Resources Development	94	87	99	100	109
McDaniel College	Human Resources Development	10	10	15	8	15

In terms of quality and value, Florida Tech's traditional face-to-face classroom delivery at the specific military locations where students work and live is a unique and distinguishing factor.

6. Market Analysis

Steady market demand for this concentration is first demonstrated by the experience offering this program and the related MS in HRM at these and other FIT Extended Studies sites. Below are graduation statistics for the last four fiscal years (covering Summer & Fall semesters for the previous year, and Spring semester of the current year). Military personnel who transfer duty stations during the course of their careers are included in these graduation statistics.

Program	2011-2012	2012-2013	2013-2014	2014-2015	4yr Avg Graduates
MS in Management – Human Resources Management	9	9	10	5	8
MS in Human Resources Management	10	9	13	11	11

Source: Florida Institute of Technology, Office of Institutional Research
<http://www.fit.edu/oir/>

Note that the MS in Human Resources Management is currently offered at the FIT Aberdeen site. Program graduates from this site are also included in these statistics. With the continued growth of NAVAIR, employing thousands in highly specialized fields, graduation levels are expected to remain steady. By offering a HRM concentration in the MS in Management program provides further opportunities for managers outside the HRM function with expanded duties involving human resources management.

7. The State's equal educational opportunity obligations under State and federal law

Florida Tech strongly and completely supports equal educational opportunity obligations under Maryland state and federal law. The following is the FIT policy statement: Notice of Nondiscrimination/Affirmative Action

Florida Tech, a private educational institution, is committed to the principle of equal opportunity for all qualified persons, welcomes students of all backgrounds and takes pride in the diversity of its faculty and staff. It assures students of access to all the privileges, programs and activities generally accorded and made available to the university.

Florida Tech strongly supports affirmative action principles and does not discriminate on the basis of creed, religion, national origin or ancestry, age, race, color, marital status, Vietnam-era veteran status, gender, sexual orientation or disability in the administration of its educational programs, admissions policies, financial aid programs, athletics, co-curricular activities or other college administered programs. Any adverse action or personnel action or other act of discrimination, based on the above may be the basis for filing a complaint of discrimination. Any student, applicant for employment or employee at Florida Tech, who believes that he or she has been discriminated against, may file a complaint of discrimination.

In addition, the out-of-State institution shall demonstrate that the proposed program, for which the institution is making application:

1. Meets a critical and compelling regional or Statewide need

Previous Base Realignment and Closure (BRAC) decisions have affected NAS Patuxent River, significantly expanding missions and capabilities, and bringing thousands of jobs to the Maryland installation. According to a recent statewide study, NAS Patuxent River rank 2nd (behind Fort George G. Meade) in an important state economic indicator:

- NAS Patuxent River, total employment 36,956, output \$7.5 billion (2nd), wages \$2.4 billion

Source: *Economic Impacts of Maryland Military Installations: (FY12 Results)*, Figure 4, p9 of Maryland Military Installation Economic Impact Study published by the Regional Economic Studies Institute of Towson University for Maryland Department of Business & Economic

Development,

<http://business.maryland.gov/Documents/ResearchDocument/MarylandMilitaryInstallationEconomicImpactStudy2015.pdf>

High-tech, defense-related programs involve effective human resources management for successful planning and execution, especially at NAS Patuxent NAS where research, development, test and evaluation, and acquisition are all core competencies. This management concentration is aimed at those who hold management responsibilities over some element of human resources management.

2. Is consistent with the Maryland State Plan for Postsecondary Education

This request for a program area of concentration is consistent with the Maryland State Plan for Postsecondary Education 2013-2017 entitled *Maryland Ready* and its six overarching goals as follows:

- 1) Quality and Effectiveness – as previously discussed, FIT brings the same high quality of face-to-face, classroom instruction delivered by university-approved faculty in all programs of study. Recruitment and retention of faculty, as well as ongoing faculty development are top priorities at the Patuxent site.
- 2) Access, Affordability, and Completion – FIT fully promotes access, affordability, and degree completion. Annual tuition increases have slowed significantly over the last 5 years. Further, tuition rates at all extended studies sites including Patuxent are one-half the amount of the on-campus graduate tuition rate. For active duty military student in particular, FIT participates in the Yellow Ribbon Program, and has introduced the Wisdom Warrior program that reimburses students in uniform the full amount of their GI Bill threshold. In other words, active duty personnel pay \$250 per credit hour, their reimbursement threshold. Finally, degree completion is a major success measure at FIT. The Patuxent site has a dedicated site director and site administrators to assist local students in completing their degrees in a timely manner.
- 3) Diversity – as previously discussed, FIT is committed to the principle of equal opportunity for all qualified persons, welcomes students of all backgrounds and takes pride in the diversity of its faculty and staff. It assures students of access to all the privileges, programs and activities generally accorded and made available to the university.
- 4) Innovation – FIT, a leading science and technology university, continually seeks innovative approaches in academic program design and delivery. Increased use of Canvas Infrastructure Learning Management System, Adobe Connect, and other instructional technology tools and aids enable a richer educational experience for students. Training on these tools is held during regular faculty meetings as part of faculty development.
- 5) Economic Growth and Vitality – FIT contributes to this goal through offering workforce-relevant programs of study. The proposed concentration areas in the MS Management

program is an example. New program development enables students and employers to stay current and vital contributors to local economic growth.

- 6) Data Use and Distribution – FIT’s Office of Institutional Research provides university leaders, faculty and staff, state and federal constituencies with timely, easily accessible and accurate information to help create an academic learning environment and to enhance institutional effectiveness. See <http://www.fit.edu/oir/> for a wide selection of available data, metrics, and reports plus the ability to customize reports.

The out-of State institution shall clearly state the demand and need for a program, for which the institution is making application, in terms of meeting present and future needs of the region and the State in general. Two kinds of need may be identified:

- 1. Societal needs, including the tradition of liberal arts education, which provides immeasurable returns to the State in part by instilling in citizens a capacity for advanced learning and individual and societal benefits regardless of workforce or market demand considerations.**

While Florida Tech offers specialized workforce-relevant programs such as the areas of management concentrations proposed, there is broader societal and community benefit derived from students, alumni, and faculty participating in local non-profits, civic organizations, schools, and in other capacities. Florida Tech staff and alumni volunteer their time and talents, serve on local boards and commissions, and help further many causes to improve local quality of life. Most importantly, the deep roster of graduate alumni from four decades of program offering serves both as a strong community asset and indicator of the priority placed on advanced education in the fairly remote region of Patuxent River, MD.

- 2. Occupational needs relative to meeting workforce requirements or upgrading vocational or technical skills.**

Management Occupations - Maryland Occupational Projections - 2012-2022

Per <http://www.dllr.state.md.us/lmi/iandoproj/maryland.shtml> there is strong current employment in human resources management and related occupations in Maryland, along with equally strong future employment projections through 2022. Highlighted for the HRM concentration in particular is *Occ Code 11-3121 Human Resources Managers*. As previously stated, the increased need for Human Resources Specialists and managers involved in HRM policies and processes at NAS Patuxent River represents the primary demand for the HRM management concentration. Again, there is no other state institution offering the MS in Management with HRM concentration as proposed.

Occ Code	Occ Title	Employment 2012	Employment 2022	Employment Chg	Open ings Replac	Open ings New	Education Value	Work Value	Job Training Value
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11-3111	Compensation and Benefits Managers	323	334	11	85	96	Bachelor's degree	5 years or more	None
11-3121	<i>Human Resources Managers</i>	1,868	2,110	242	491	733	<i>Bachelor's degree</i>	<i>5 years or more</i>	<i>None</i>
11-3131	Training and Development Managers	656	736	80	172	252	Bachelor's degree	5 years or more	None

Source: Maryland Department of Labor, Licensing and Regulation, Maryland Occupational Projections 2012 – 2022, Maryland Industry Projections

1. Degree to be Awarded: M.S. in Systems Management – Information Systems

1a. Site Locations Proposed: Aberdeen

2. Area of Specialization: Information Systems

3. Purpose or Objective: The goal of the Master of Science in Systems Management - Information Systems is to prepare individuals for advanced systems management positions in the private, public and military sectors with specific skills and competencies in Information Systems.

4. Specific Academic Content:

Program Prerequisite
MTH 1701 College Algebra

Required Courses

MGT 5006 Introductory Managerial Statistics
MGT 5014 Information Systems
MGT 5066 Systems Analysis and Modeling
MGT 5067 System Management
MGT 5150 Management of Software Systems
MGT 5151 Database Systems Management
MGT 5152 Computer Systems Administration
MGT 5153 Telecommunications Systems Management
MGT 5904 Systems Management Capstone Project

Directed Electives

MGT 5133 Advanced Analytical Methods for Management
MGT 5154 Advanced Management Information Systems

Total Credits Required: 33

5. Quality of the proposed program in comparison to existing programs

FIT Aberdeen presently offers the MS in Systems Management. This is a specialized degree program for Systems Managers that handle enterprise-wide administration of computer systems such as network management, telecommunications, data storage and other automated centralized processes. At Aberdeen, a primary application of systems management is within the Army C4I arena of Command, Control, Communications, Computers, and Intelligence systems, central to the mission of CECOM.

The MS in Systems Management with concentration in Information Systems (IS) enables systems managers to bring more emphasis to information systems aspects of complex defense systems/subsystems. They could be in engineering and technology, logistics, or even business and finance but their systems management interest is in IS, whether done in house or through contracted services. The knowledge gained from the concentration in IS enables these students to better understand the intricacies of IS policies and processes which increases their overall systems management effectiveness.

6. Market Analysis

According to the MHEC publication, *Trends in Degrees and Certificates by Program 2001-2014*, February 2015 there is no MS in Systems Management with a concentration in IS offered in Maryland. We have identified only one similar program with the same title, MS in Systems Management offered by Capitol Technology University, but it is not a concentration and has had no enrollments.

In terms of quality and value, Florida Tech’s traditional face-to-face classroom delivery at the specific military locations where students work and live is a unique and distinguishing factor.

Steady market demand for this concentration is first demonstrated by the experience offering this program at other FIT Extended Studies sites. Below are graduation statistics for the last four fiscal years (covering Summer & Fall semesters for the previous year, and Spring semester of the current year). Military personnel who transfer duty stations during the course of their careers are included in these graduation statistics.

Program	2011-2012	2012-2013	2013-2014	2014-2015	4yr Avg Grad's
MS in Systems Management with concentration in IS	1	1	0	4	2

Source: Florida Institute of Technology, Office of Institutional Research
<http://www.fit.edu/oir/>

Systems managers are employed in all sectors of the economy, with approximately 100,000 systems managers employed in private, public and government positions in the United States, according to the United States Bureau of Labor Statistics. Most systems managers hold professional I.T. certifications and find advanced level expertise to technology careers in manufacturing, space, research and development, engineering, healthcare, and more.

7. The State's equal educational opportunity obligations under State and federal law

Florida Tech strongly and completely supports equal educational opportunity obligations under Maryland state and federal law. The following is the FIT policy statement: Notice of Nondiscrimination/Affirmative Action

Florida Tech, a private educational institution, is committed to the principle of equal opportunity for all qualified persons, welcomes students of all backgrounds and takes pride in the diversity of its faculty and staff. It assures students of access to all the privileges, programs and activities generally accorded and made available to the university.

Florida Tech strongly supports affirmative action principles and does not discriminate on the basis of creed, religion, national origin or ancestry, age, race, color, marital status, Vietnam-era veteran status, gender, sexual orientation or disability in the administration of its educational programs, admissions policies, financial aid programs, athletics, co-curricular activities or other college administered programs. Any adverse action or personnel action or other act of discrimination, based on the above may be the basis for filing a complaint of discrimination. Any student, applicant for employment or employee at Florida Tech, who believes that he or she has been discriminated against, may file a complaint of discrimination.

In addition, the out-of-State institution shall demonstrate that the proposed program, for which the institution is making application:

1. Meets a critical and compelling regional or Statewide need

Previous Base Realignment and Closure (BRAC) decisions have affected Aberdeen Proving Ground, significantly expanding missions and capabilities, and bringing thousands of jobs to the Maryland installation. According to a recent statewide study, APG rank 2nd (behind Fort George G. Meade) in important state economic indicators:

- Aberdeen Proving Ground, total employment 46,583 (2nd), output \$6.2 billion, wages \$3.1 billion (2nd)

Source: *Economic Impacts of Maryland Military Installations: (FY12 Results)*, Figure 4, p9 of Maryland Military Installation Economic Impact Study published by the Regional Economic Studies Institute of Towson University for Maryland Department of Business & Economic Development,

<http://business.maryland.gov/Documents/ResearchDocument/MarylandMilitaryInstallationEconomicImpactStudy2015.pdf>

The vast majority of high-tech, defense-related jobs involve information systems in one form or another, especially at APG where research, development, engineering, test and evaluation are core competencies. This management concentration is aimed at those who hold systems management responsibilities over some element of information systems.

2. Is consistent with the Maryland State Plan for Postsecondary Education

This request for a program area of concentration is consistent with the Maryland State Plan for Postsecondary Education 2013-2017 entitled *Maryland Ready* and its six overarching goals as follows:

- 1) Quality and Effectiveness – as previously discussed, FIT brings the same high quality of face-to-face, classroom instruction delivered by university-approved faculty in all programs of study. Recruitment and retention of faculty, as well as ongoing faculty development are top priorities at the Aberdeen site.
- 2) Access, Affordability, and Completion – FIT fully promotes access, affordability, and degree completion. Annual tuition increases have slowed significantly over the last 5 years. Further, tuition rates at all extended studies sites including Aberdeen are one-half the amount of the on-campus graduate tuition rate. For active duty military student in particular, FIT participates in the Yellow Ribbon Program, and has introduced the Wisdom Warrior program that reimburses students in uniform the full amount of their GI Bill threshold. In other words, active duty personnel pay \$250 per credit hour, their reimbursement threshold. Finally, degree completion is a major success measure at FIT. The Aberdeen site has a dedicated site director and site administrators to assist local students in completing their degrees in a timely manner.
- 3) Diversity – as previously discussed, FIT is committed to the principle of equal opportunity for all qualified persons, welcomes students of all backgrounds and takes pride in the diversity of its faculty and staff. It assures students of access to all the privileges, programs and activities generally accorded and made available to the university.
- 4) Innovation – FIT, a leading science and technology university, continually seeks innovative approaches in academic program design and delivery. Increased use of Canvas Infrastructure Learning Management System, Adobe Connect, and other instructional technology tools and aids enable a richer educational experience for students. Training on these tools is held during regular faculty meetings as part of faculty development.
- 5) Economic Growth and Vitality – FIT contributes to this goal through offering workforce-relevant programs of study. The proposed concentration areas in the MS Management program is an example. New program development enables students and employers to stay current and vital contributors to local economic growth.
- 6) Data Use and Distribution – FIT's Office of Institutional Research provides university leaders, faculty and staff, state and federal constituencies with timely, easily accessible and accurate information to help create an academic learning environment and to enhance institutional effectiveness. See <http://www.fit.edu/oir/> for a wide selection of available data, metrics, and reports plus the ability to customize reports.

The out-of State institution shall clearly state the demand and need for a program, for which the institution is making application, in terms of meeting present and future needs of the region and the State in general. Two kinds of need may be identified:

- 1. Societal needs, including the tradition of liberal arts education, which provides immeasurable returns to the State in part by instilling in citizens a capacity for advanced learning and individual and societal benefits regardless of workforce or market demand considerations.**

While Florida Tech offers specialized workforce-relevant programs such as the areas of management concentrations proposed, there is broader societal and community benefit derived from students, alumni, and faculty participating in local non-profits, civic organizations, schools, and in other capacities. Florida Tech staff and alumni volunteer their time and talents, serve on local boards and commissions, and help further many causes to improve local quality of life. Most importantly, the deep roster of graduate alumni from four decades of program offering serves both as a strong community asset and indicator of the priority placed on advanced education in the fairly remote regions of Aberdeen, MD.

- 2. Occupational needs relative to meeting workforce requirements or upgrading vocational or technical skills.**

Management Occupations - Maryland Occupational Projections - 2012-2022

Per <http://www.dllr.maryland.gov/lmi/iandoproj/occgroupp11.shtml> there is strong current employment in a wide range of management occupations in Maryland, along with equally strong future employment projections through 2022. As previously stated, the increased need for systems managers familiar with information systems capabilities at Aberdeen Proving Ground represents the primary demand for the MS in Systems Management with Information Systems concentration as proposed by FIT.

Occ Code	Occ Title	Employment 2012	Employment 2022	Employment Chg	Open ings Replac	Open ings New	Education Value	Work Value	Job Training Value
11-3021	Computer and Information Systems Managers	10,671	12,245	1,574	1,483	3,057	Bachelor's degree	5 yrs or more	None

1. Degree to be Awarded: M.S. in Systems Management – Operations Research

1a. Site Locations Proposed: Aberdeen

2. Area of Specialization: Operations Research

3. Purpose or Objective: The goal of the Master of Science in Systems Management – Operations Research is to prepare individuals for advanced systems management positions in the private, public and military sectors with specific skills and competencies in Operations Research.

4. Specific Academic Content:

Program Prerequisite

MTH 1000 Precalculus

MTH 1001 Calculus 1

MTH 1002 Calculus 2

Required Courses

MGT 5006 Introductory Managerial Statistics

MGT 5013 Organizational Behavior

MGT 5014 Information Systems

MGT 5066 Systems Analysis and Modeling

MGT 5067 System Management

MGT 5904 Systems Management Capstone Project

MTH 5401 Applied Statistical Analysis

ORP 5001 Deterministic Operations Research Models

Directed Electives

MTH 5411 Mathematical Statistics 1

ORP 5002 Stochastic Operations Research Models

ORP 5003 Operations Research Practice

Total Credits Required: 33

5. Quality of the proposed program in comparison to existing programs

FIT Aberdeen presently offers both the MS in Systems Management and MS in Operations Research. These are specialized degree program for Systems Managers that handle enterprise-wide administration of computer systems such as network management, telecommunications, data storage and other automated centralized processes. At Aberdeen, a primary application of systems management is within the Army C4I arena of

Command, Control, Communications, Computers, and Intelligence systems, central to the mission of CECOM.

The MS in Systems Management with concentration in Operations Research (OR) enables systems managers to bring more emphasis to operations research aspects of complex defense systems/subsystems. They could be in engineering and technology, logistics, or even business and finance but their systems management interest is in OR, whether done in house or through contracted services. The knowledge gained from the concentration in IS enables these students to better understand the intricacies of OR policies and processes which increases their overall systems management effectiveness.

6. Market Analysis

According to the MHEC publication, *Trends in Degrees and Certificates by Program 2001-2014*, February 2015 there is no MS in Systems Management with a concentration in OR offered in Maryland. We have identified only one similar program with the same title, MS in Operations Research offered by Morgan State University, but it is not a concentration and has had no enrollments.

In terms of quality and value, Florida Tech's traditional face-to-face classroom delivery at the specific military locations where students work and live is a unique and distinguishing factor.

Steady market demand for this concentration is first demonstrated by the experience offering this program at other FIT Extended Studies sites. Below are graduation statistics for the last four fiscal years (covering Summer & Fall semesters for the previous year, and Spring semester of the current year). Military personnel who transfer duty stations during the course of their careers are included in these graduation statistics.

Program	2011-2012	2012-2013	2013-2014	2014-2015	4yr Avg Grad's
MS in Systems Management with concentration in OR	0	4	2	1	2

Source: Florida Institute of Technology, Office of Institutional Research
<http://www.fit.edu/oir/>

Systems managers are employed in all sectors of the economy, with approximately 100,000 systems managers employed in private, public and government positions in the United States, according to the United States Bureau of Labor Statistics. Most systems managers hold professional I.T. certifications and find advanced level expertise to technology careers in manufacturing, space, research and development, engineering, healthcare, and more.

7. The State's equal educational opportunity obligations under State and federal law

Florida Tech strongly and completely supports equal educational opportunity obligations under Maryland state and federal law. The following is the FIT policy statement: Notice of Nondiscrimination/Affirmative Action

Florida Tech, a private educational institution, is committed to the principle of equal opportunity for all qualified persons, welcomes students of all backgrounds and takes pride in the diversity of its faculty and staff. It assures students of access to all the privileges, programs and activities generally accorded and made available to the university.

Florida Tech strongly supports affirmative action principles and does not discriminate on the basis of creed, religion, national origin or ancestry, age, race, color, marital status, Vietnam-era veteran status, gender, sexual orientation or disability in the administration of its educational programs, admissions policies, financial aid programs, athletics, co-curricular activities or other college administered programs. Any adverse action or personnel action or other act of discrimination, based on the above may be the basis for filing a complaint of discrimination. Any student, applicant for employment or employee at Florida Tech, who believes that he or she has been discriminated against, may file a complaint of discrimination.

In addition, the out-of-State institution shall demonstrate that the proposed program, for which the institution is making application:

1. Meets a critical and compelling regional or Statewide need

Previous Base Realignment and Closure (BRAC) decisions have affected Aberdeen Proving Ground, significantly expanding missions and capabilities, and bringing thousands of jobs to the Maryland installation. According to a recent statewide study, APG rank 2nd (behind Fort George G. Meade) in important state economic indicators:

- Aberdeen Proving Ground, total employment 46,583 (2nd), output \$6.2 billion, wages \$3.1 billion (2nd)

Source: *Economic Impacts of Maryland Military Installations: (FY12 Results)*, Figure 4, p9 of Maryland Military Installation Economic Impact Study published by the Regional Economic Studies Institute of Towson University for Maryland Department of Business & Economic Development,

<http://business.maryland.gov/Documents/ResearchDocument/MarylandMilitaryInstallationEconomicImpactStudy2015.pdf>

The nature of modern high-tech, defense systems involves complex mathematical and operations research considerations, especially at APG where research, development, engineering, test and evaluation are core competencies. This systems management concentration is aimed at those who hold systems management responsibilities over some element of operations research.

2. Is consistent with the Maryland State Plan for Postsecondary Education

This request for a program area of concentration is consistent with the Maryland State Plan for Postsecondary Education 2013-2017 entitled *Maryland Ready* and its six overarching goals as follows:

- 1) Quality and Effectiveness – as previously discussed, FIT brings the same high quality of face-to-face, classroom instruction delivered by university-approved faculty in all programs of study. Recruitment and retention of faculty, as well as ongoing faculty development are top priorities at the Aberdeen site.
- 2) Access, Affordability, and Completion – FIT fully promotes access, affordability, and degree completion. Annual tuition increases have slowed significantly over the last 5 years. Further, tuition rates at all extended studies sites including Aberdeen are one-half the amount of the on-campus graduate tuition rate. For active duty military student in particular, FIT participates in the Yellow Ribbon Program, and has introduced the Wisdom Warrior program that reimburses students in uniform the full amount of their GI Bill threshold. In other words, active duty personnel pay \$250 per credit hour, their reimbursement threshold. Finally, degree completion is a major success measure at FIT. The Aberdeen site has a dedicated site director and site administrators to assist local students in completing their degrees in a timely manner.
- 3) Diversity – as previously discussed, FIT is committed to the principle of equal opportunity for all qualified persons, welcomes students of all backgrounds and takes pride in the diversity of its faculty and staff. It assures students of access to all the privileges, programs and activities generally accorded and made available to the university.
- 4) Innovation – FIT, a leading science and technology university, continually seeks innovative approaches in academic program design and delivery. Increased use of Canvas Infrastructure Learning Management System, Adobe Connect, and other instructional technology tools and aids enable a richer educational experience for students. Training on these tools is held during regular faculty meetings as part of faculty development.
- 5) Economic Growth and Vitality – FIT contributes to this goal through offering workforce-relevant programs of study. The proposed concentration areas in the MS Systems Management program is an example. New program development enables students and employers to stay current and vital contributors to local economic growth.
- 6) Data Use and Distribution – FIT's Office of Institutional Research provides university leaders, faculty and staff, state and federal constituencies with timely, easily accessible and accurate information to help create an academic learning environment and to enhance institutional effectiveness. See <http://www.fit.edu/oir/> for a wide selection of available data, metrics, and reports plus the ability to customize reports.

The out-of State institution shall clearly state the demand and need for a program, for which the institution is making application, in terms of meeting present and future needs of the region and the State in general. Two kinds of need may be identified:

1. Societal needs, including the tradition of liberal arts education, which provides immeasurable returns to the State in part by instilling in citizens a capacity for advanced learning and individual and societal benefits regardless of workforce or market demand considerations.

While Florida Tech offers specialized workforce-relevant programs such as the areas of management concentrations proposed, there is broader societal and community benefit derived from students, alumni, and faculty participating in local non-profits, civic organizations, schools, and in other capacities. Florida Tech staff and alumni volunteer their time and talents, serve on local boards and commissions, and help further many causes to improve local quality of life. Most importantly, the deep roster of graduate alumni from four decades of program offering serves both as a strong community asset and indicator of the priority placed on advanced education in the fairly remote regions of Aberdeen, MD.

2. Occupational needs relative to meeting workforce requirements or upgrading vocational or technical skills.

Management and Computer/Mathematical Operations from Maryland Occupational Projections - 2012-2022

Per <http://www.dllr.maryland.gov/lmi/iandoproj/occgroupp11.shtml> there is strong current employment in a wide range of systems management occupations in Maryland, along with equally strong future employment projections through 2022. As previously stated, the increased need for systems managers familiar with operations research at Aberdeen Proving Ground represents the primary demand for the MS in Systems Management with Operations Research concentration as proposed by FIT.

Occ Code	Occ Title	Employment 2012	Employment 2022	Employment Chg	Open ings Replac	Open ings New	Education Value	Work Value	Job Training Value
11-9041	Architectural and Engineering Managers	4,389	4,587	198	1,077	1,275	Bachelor's degree	5 years or more	None
11-3000	Operations Specialties Managers	35,926	38,946	3,020	6,370	9,434			
15-2031	Operations Research Analysts	2,850	3,577	727	641	1,368	Bachelor's degree	None	None

Attachment 1
Add-on Program AOC Proposals

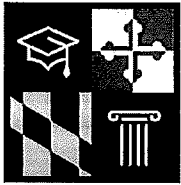
New Program Areas of Concentration (AOC) – Aberdeen

Program - Concentration Title	Degree	Mode of Instruction	Total Credit Hours	Offered on Main Campus Yes/No
Management – Acquisition and Contract Management	M.S.	Classroom	33	Yes
Management – Information Systems	M.S.	Classroom	33	Yes
Management – Logistics Management	M.S.	Classroom	33	Yes
Systems Management – Information Systems	M.S.	Classroom	33	Yes
Systems Management – Operations Research	M.S.	Classroom	33	Yes

New Program Areas of Concentration (AOC) – Patuxent

Program - Concentration Title	Degree	Mode of Instruction	Total Credit Hours	Offered on Main Campus Yes/No
Management – Acquisition and Contract Management	M.S.	Classroom	33	Yes
Management – Human Resources Management	M.S.	Classroom	33	Yes
Management – Information Systems	M.S.	Classroom	33	Yes

Each new program will be presented in this order following the guidance provided in COMAR 13B.02.01.06.



MHEC

Creating a state of achievement

Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor

Anwer Hasan
Chairperson

Jennie C. Hunter-Covera
Acting Secretary

August 17, 2015

Dr. Anthony James Catanese
President
Florida Institute of Technology
150 West University Blvd.
Melbourne, FL 32901

Dear President Catanese:

The Maryland Higher Education Commission has received an application from Florida Institute of Technology to renew eleven existing programs and an area of concentration within an approved program and to offer three new programs and a new area of concentration within an approved program at its Patuxent River location. I am pleased to inform you that Florida Institute of Technology is authorized to offer the programs listed below until August 31, 2020.

Approved programs:

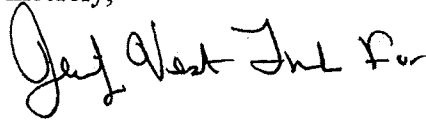
- I. Post-Baccalaureate Certificate (P.B.C.) in Acquisition and Contract Management
- II. Bachelor of Science (B.S.) in Logistics Management (2+2 with College of Southern Maryland)
- III. Master of Science (M.S.) in Logistics Management
- IV. Master of Business Administration (M.B.A.)
- V. Master of Science (M.S.) in Aerospace Engineering
- VI. Master of Science (M.S.) in Computer Information Systems
- VII. Master of Science (M.S.) in Computer Science
- VIII. Master of Science (M.S.) in Acquisition and Contract Management
- IX. Master of Science (M.S.) in Electrical Engineering
- X. Master of Science (M.S.) in Engineering Management
- XI. Master of Science (M.S.) in Management
 - a. A.O.C. in Logistics Management
- XII. Master of Science (M.S.) in Mechanical Engineering
- XIII. Master of Science (M.S.) in Project Management
 - a. A.O.C.s in Information Systems and Operations Research
- XIV. Master of Public Administration (M.P.A.)

An electronic renewal form and the regulations for out-of-state institutions are available on the Commission's website under "Academic Approval Process" at www.mhec.state.md.us. In order to operate at the approved location after the stated expiration date, the renewal application should be completed and submitted to this office no later than five months before the institution proposes to commence operation for the academic year 2020-2021. If applicable, the use of VA

benefits for these programs should be coordinated through Ms. Trish Gordon-McCown, Associate Director -Veterans Affairs. She can be reached at 410-767-3098.

Please keep us informed of any changes contemplated in your offerings in Maryland. We look forward to continuing the cooperative relationship developed between your institution and the Maryland Higher Education Commission.

Sincerely,



Jennie C. Hunter-Cevera, Ph.D.
Acting Secretary of Higher Education

JCHC:JVF:mrw

C: Dr. Robert Schaller, Site Director, Florida Institute of Technology