I. Title/department/College
Bachelor of Science (BS) degree in Applied Technical Leadership (ATL) offered by the Department of Service Systems, College of Applied Science & Technology

II. Abstract
The College of Applied Science and Technology (CAST), Department of Service Systems (DSS), proposes a new Bachelor of Science (BS) degree in Applied Technical Leadership (ATL). This proposed degree is an upper level online degree designed to provide the advanced education that can enhance career advancement options for working adults in a variety of technical/technology, public service (law enforcement, fire service), medical (CPA, LPN), and related fields.

The degree builds upon a completed two year associate degree. It is expected that the earned two year associate degree focuses on an area of study that enhances the current technical or professional career of the student. This program is intended for people currently in the workforce who are looking to advance in their career fields as described in this paper. The ATL degree is not intended for those seeking first career positions or changing careers.

Applicants to the program must be currently employed and have a minimum of three years of work experience in a career position relevant to the career fields described above or, must have a minimum of three years’ work experience as described above within the five years prior to application. Because of the specific coursework in the associate degrees it is expected that students will not qualify to apply for credit by exam or experience. In cases of duplicate content, appropriate course substitutions will be made.

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<th>Admission Criteria (required)</th>
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<td>Associate Degree/2.5 GPA or higher and</td>
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<td>A minimum of three years’ work experience in a career position as described in this concept paper that is satisfied either through current employment or completed within the five years prior to application</td>
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<td>Bachelor of Science in Applied Technical Leadership</td>
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III. Program Description
a. Overview and justification of program
The Applied Technical Leadership degree proposed by the CAST/Department of Service Systems would be offered as a fully online BS completer degree aimed at those who have finished two-year
professional/technical degrees with at least a 2.5 GPA in areas such as nursing or other medically-related curriculums, police, fire service, technology or similar and, those in the military. As described above, the Applied Technical Leadership is intended for individuals working in their career field and the expectation is that students seeking to enter this program will have at least three years of experience working in their chosen field either currently employed or within the five years prior to their program application.

Working associate degree prepared learners in specialized fields need upper level education that builds on their completed associate degree work, connects to their career field and career aspirations, and is delivered in a manner that allows them to balance the competing demands of work, family and education. Goals of the proposed ATL program include:

- Facilitate career development professionally and academically for career-oriented learners with associate degrees in fields such as nursing (CNA, LPN, other medically-related etc...), law enforcement, fire service, and other technical/technology disciplines,
- Meet the needs of specific populations such as military/veterans,
- Attract part-time students, however, the ATL degree can accommodate students who wish a full time schedule of online courses.
- Support RIT initiatives in online education. The complete degree program would be available via on-line instruction serving the market needs of place-bound and distributed students,
- Provide a curriculum that complements the discipline-specific education and training of the earned associate degree with upper level learning in applied leadership development and applications. Utilize content areas at RIT such as human resource development, service quality, and topics such as emergency management to create a unique online program, and
- Deliver an integrated learning experience connecting innovation concepts to the content of the ATL degree with application in the learner’s professional practice/career.

b. Summary of Program Curriculum
The ATL degree has been structured to maximize transfer credit and it is anticipated that students will enter with 3rd year status. An admission expectation that students are employed or have recent work experience in their career-related field allows the curriculum to enrich the student’s career background in topics included in course work and the ability to apply leadership concepts and tools to specific work environments.

1) Admission requirements
   a) Earned associate degree with a 2.5 gpa or higher that includes coursework in science (at least one must be a lab science to avoid the challenges of teaching laboratory courses on-line), Psychology, Economics, Statistics, and Mathematics
   b) Significant work experience in the specific professional or technical/technology career fields described in this concept paper is expected. Applicants must be currently employed in their career field at least 3 years or have a minimum of three years’ experience in their career field within the last 5 years.

2) Total RIT degree requirements = 120 sch. It is expected that students would enter with approximately 60 sch in transfer credit.

3) Proposed RIT degree requirements
   a) General education – 60 sch (includes a department required course in Technical Communication as part of General Education). It is anticipated that the needed online curriculum will be predominately upper level coursework (Immersion requirement and open general education electives). Many of these courses are already offered online to current RIT online students. Regional students would have access to on-campus general education courses.
   b) Major area of study 30 sch. (10 courses) core coursework in the following content areas:
(1) **Four courses in applied technical leadership development**  
(a) Introduction to foundations of leadership development in applied technology fields  
(b) Contemporary issues in technical/technology, public service (law enforcement, fire service), medical (CPA, LPN and other medically–related careers), and related fields/industries  
(c) Human resource training and career development  
(d) Conflict negotiation and interpersonal interventions  

(2) **Six courses in applications of technical leadership including a capstone project**  
(a) Fundamentals of accounting  
(b) Project management  
(c) Fundamentals of service quality  
(d) Topics such as emergency management, occupational health and /or safety  
(e) Policy development and planning technical/technology, public service (law enforcement, fire service), medical (CPA, LPN), and related fields/industries  
(f) Senior Capstone project  

  c) **24 sch professional/technical electives** (Most completed through transfer credit)  
  d) **6 sch free electives**

### IV. Fit with RIT’s Mission and Strategic Direction

RIT’s mission is to provide a broad range of career-oriented educational programs with the goal of producing innovative, creative graduates who are well-prepared for their chosen careers in a global society. (RIT Strategic Plan 2005-2015). The ATL degree supports the RIT mission statement.

The ATL degree also supports the RIT mission in online education and the goals of the new Innovative Learning Institute (ILI) as the proposed Applied Technical Leadership degree would be available fully online.

The ATL degree provides competency-based expertise in technical leadership development, human capital development and foundation skills in how to plan, lead, and manage technical initiatives relevant to their career path. This orientation to applied education is a cornerstone of RIT’s educational philosophy in teaching and learning.

### Degree compatibility within College/Department

This degree program fits within the strategic direction of the college and the department. CAST strategy articulates that both graduate and undergraduate programming be offered within each department throughout the College.

- The proposed ATL undergraduate degree complements and feeds into the current Department of Service Systems graduate programs as well as other RIT graduate programs,
- ATL content is within the current faculty expertise in the DSS department and within CAST for specialized technology course content,
- Re-direction of a currently existing and available faculty line within the DSS department results in no new faculty needs at startup to support this program,
- CAST and DSS faculty are experienced in many non-traditional delivery formats including online delivery, and
- The ATL degree will not conflict with AACSB requirements. For example, the University of Southern Maine is AACSB accredited and has a non-AACSB accredited degree in Applied Technical Leadership offered within USM’s College of Science, Technology and Health -School of Applied Science, Engineering, and Technology-Department of Technology.
V. Synergy with other Programs
Many online courses across the university could serve students in this program. Some additional examples of synergy and collaboration include:

- In addition to the undergraduate curriculum connections, graduates of this undergraduate program will be able to continue their education at RIT in a variety of programs thus acting as a feeder to advanced graduate studies at RIT.
- Approximately 30 credits will be online higher level general studies courses (Immersion and open general education electives). Other existing online RIT programs also require these courses.
- Most required core courses come from the CAST Department of Service Systems and CAST School of Engineering Technology.
- A course such as Financial Accounting could come from Saunders College of Business if available in an online format.
- Laboratory facilities are not required. Courses in the major area of study are not laboratory based. The general education perspective requiring a lab science must be completed prior to admission.
- Other collaborations remain possible.

VI. Administrative Structure of New Program
The ATL program fits within the existing structure and resources of the CAST Department of Service Systems. Administrative and academic advising resources are already assigned to the department. The department chair is Dr. Linda Underhill.

VII. Enrollment Management Expectations and Sustainment
This is a marketable program with potential of enhancing undergraduate enrollment for markets new to RIT and could provide pathways to RIT graduate studies:

- The ATL program supports a professional and academic career path for ‘career enhancement’ and/or ‘upward mobility’ that complements many different types of professionally-focused associate degrees in a convenient online delivery format, increasing the potential pool of prospective students,
- On-line delivery attracts students from outside the Rochester market area and can also meet the needs of place bound students within Rochester,
- A Google search using the terms ‘applied technical leadership’ or ‘technical leadership’ shows a variety of curriculum approaches and delivery. Many technology leadership programs are traditional on-campus undergraduate programs, some focus more on organizational development, and others serve regional or specialized populations. For example, at the University of Southern Maine (USM) a program in Applied Technical Leadership is offered only via a face-to-face delivery mode for place bound students; at St. Louis University an online degree in Organizational Leadership and Technology is aimed solely at IT professionals; and at Bloomburg University, the Technical Leadership program is offered through a blend of online and on-campus courses. The programs are typically in colleges or departments of technology or education depending on the approach.
- In Spring 2011 a preliminary curriculum development meeting was held with Dr. James G. Miller VP of Enrollment at RIT. Dr. Miller and his team provided insights and suggestions that have been incorporated into the curriculum. A revised copy of this proposal has been sent to RIT Enrollment Management and Career Services,
- The proposed curriculum has been reviewed by Dr. Neil Hair, RIT-Innovative Learning Institute. In his email of October 9, 2012, Dr. Hair stated, ‘I was really excited to hear the details of the proposal for your Applied Technical Leadership online program. This is exactly the sort of innovative approach and marketable content that RIT aspires towards leading’ and,
- The ATL uses a building block approach that is attractive to adult learners
VIII. Impact on Resources
- Approximately seven of the ten required courses in the major area of study are new courses,
- Re-direction of an existing and available faculty line within the DSS department results in no new faculty needs at startup to support this program. No new office or facilities are required,
- DSS could accommodate approximately 30 students with current resources,
- As an on-line program, the ATL degree would not require classroom space during times of peak demand,
- The ATL degree does not require laboratory resources. Admission requirements of an earned associate degree that includes a lab-based science means that RIT would not need to offer lab-based online science courses.
  - Associate degree must include mathematics and lower level liberal arts,
  - The program follows the standard RIT General Education requirement for a BS degree. A review of potential transfer associate degrees shows that the earned associate degree admission requirement can maximize transfer credit for the lower division general education requirement. It is anticipated that many requirements in mathematics, science, writing, and other lower division areas will be satisfied through transfer credit, and
  - Students who transfer credit from a completed associate degree that for example, did not include a lab science will be required to complete the course prior to acceptance into the ATL program.

IX. Conclusion
The Applied Technical Leadership program is an upper level completer degree that builds on the discipline-based strength of a faculty accustomed to developing curriculum for and teaching on-line; can satisfy the unmet needs of many local and national two year graduates who are working professionals and who seek a Bachelor of Science degree which accommodates their working and personal lives. The ATL degree fits with the strategic mission of RIT and new strategies and initiatives such as the Innovative Learning Institute. The ATL curriculum is: designed to be fully online, requires an earned associate degree with specific laboratory and other general education admission requirements, and has available resources which can be used for program start-up in the home department.

In conclusion, concept of the ATL degree program meets RIT’s vision and long range goals, the needs of the targeted student population and the strategic plan mission of the College of Applied Science & Technology.

X. Summary of Community Input and Response to Input