

# TECHNOLOGY ADMINISTRATION, BAS

The Bachelor of Applied Science degree with a major in Technology Administration is available for students who have completed an occupational oriented associate degree and are interested in pursuing further studies to advance in a technology-management related career. The degree accommodates students from diverse disciplines whose associate degree academic major does not easily lead to a bachelor's degree.

The nature of the program affords the flexibility to meet the needs of students from many technical backgrounds who desire to develop or expand skills to enhance their career opportunities. The curriculum is designed to complement the students' technical and professional skills by providing foundation studies in technological, leadership and management topics. A minor is required that provides additional knowledge and experience. All courses in the major are offered completely on-line using a variety of instructional approaches addressing different learning styles. Interested students should contact the School of Applied Studies for specific requirements or visit: <https://www.washburn.edu/academics/college-schools/applied-studies/departments/allied-health/bas/index.html> (<https://www.washburn.edu/academics/college-schools/applied-studies/departments/allied-health/bas/>)

## Mission

The Technology Administration Program develops managers, team leaders, supervisors and other professionals who understand technology; its impact on humanity; and use tools, techniques, and systems to enhance their effectiveness in a global, competitive environment.

## Washburn University Assessment – Program Student Learning Outcomes

Technology Administration students at Washburn University, upon graduation, are expected to be able to:

- PSLO 1: Demonstrate the impact that technology has on the individual, society, and civilization.
- PSLO 2: Apply the current legal decisions and organization policies to the development and management of technology.
- PSLO 3: Apply life cycle system development methods to reduce risks associated with management decisions.
- PSLO 4: Demonstrate the application of process and behavior data to improve efficiency in a production environment.
- PSLO 5: Identify the core competencies of effective project management and demonstrate how skilled project managers are crucial to an organization.
- PSLO 6: Select quality indicators that can be used to modify inputs and impact measured system outputs in a management operation.
- PSLO 7: Demonstrate competence in the use of the skills required for analyzing, communicating and problem solving complex and unpredictable situations where the management of technology is a central issue.
- PSLO 8: Demonstrate oral and written communication skills, and the ability to work in teams.

## Major

The major for this degree consists of an integrative core of technological and management courses. This sequence of courses focuses on personnel management, organizational systems, personal leadership, the evolution and impact of technology, systems design and evaluation, safety issues and quality assurance, and a capstone technology project. Elective classes focus on the role of technology in relation to the natural world, tools to look forward to the role technology will take, the design and application of technology policy, individual and in-depth research, the process of planning for technology including project management, and individualized internships.

## Minor Options

Recommend minor options include Business Administration, Communication Studies, Health Services Administration or Public Administration. Specific course requirements for the minors appear in the information below. For assistance, in declaring a minor, please contact the:

Brenneman School of Business office (785) 670-1308;

Communication Studies office (785) 670-2230;

Health Services Administration office (785) 670-2170 or,

Public Administration office (785) 670-1737.

## Applied Science/Technology Area

This section of the degree program relates to the major courses from the student's associate degree. Because of the diverse nature of associate degree programs, credit hour completion of technical related courses could range up to 48 credit hours.

## Admission Requirements

Candidates for admission to the Bachelor of Applied Science degree program with a major in Technology Administration must meet the following requirements:

- Completion of a certificate or an associate degree from an accredited institution.
- A cumulative grade point average of 2.0 or higher on a 4-point scale on the associate degree and with a grade of "C" or higher in all major and related courses.
- Contact the Technology Administration Program coordinator for advising.

## Technology Administration Degree Requirements

In addition to the requirements stated below, students must complete a certificate or associate degree in a technical area, an additional 31-32 hours of General Education (<https://catalog.washburn.edu/undergraduate/programs-degrees-graduation-requirements/general-education-requirements/>), and any additional hours needed to reach the minimum 120 credit hours required for graduation. Some of the courses below may also fulfill general education requirements. Please see your advisor for more information.

| Code   | Title  | Hours        |
|--|--|--------------|
| <b>Required Math Gateway Course</b>  |  |              |
| MA 112   | Contemporary College Mathematics <sup>1</sup>                | 3            |
| <b>Required Courses Inside Department</b>  |  |              |
| TA 300   | Evolution & Development of Technology                        | 3            |
| TA 310   | Technology & Society   | 3            |
| TA 320   | System Design, Assessment, & Evaluation                      | 3            |
| TA 330   | Safety Analysis & Quality Assurance                          | 3            |
| TA 400   | Technology Administration                                    | 3            |
| TA 420   | Technology Project   | 3            |
| Select three of the following:   |  | 9            |
| TA 340   | Technology Policy  |              |
| TA 360   | Independent Study  |              |
| TA 370   | Technology Internship  |              |
| TA 380   | Technology and the Future                                    |              |
| TA 381   | Technology and Ecology                                       |              |
| TA 390   | Special Topics in Technology                                 |              |
| TA 410   | Technology Planning  |              |
| Subtotal   |  | 30           |
| <b>Required Courses Outside Department</b>   |  |              |
| EN 300<br>or EN 308  | Advanced College Writing<br>Scientific and Technical Writing | 3            |
| WU 101   | The Washburn Experience                                      | 3            |
| Subtotal   |  | 6            |
| <b>Minor Requirement</b>   |  |              |
| Select a minor:  |  | 15-21        |
| Business Minor ( <a href="https://catalog.washburn.edu/undergraduate/school-business/programs-interest-both-business-majors-non-business-majors/business-minor/">https://catalog.washburn.edu/undergraduate/school-business/programs-interest-both-business-majors-non-business-majors/business-minor/</a> )                             |  |              |
| Communication Studies Minor ( <a href="https://catalog.washburn.edu/undergraduate/college-arts-sciences/communication/communication-studies-minor/">https://catalog.washburn.edu/undergraduate/college-arts-sciences/communication/communication-studies-minor/</a> )  |  |              |
| Health Services Administration Minor ( <a href="https://catalog.washburn.edu/undergraduate/school-applied-studies/family-human-services-department/health-services-administration-minor/">https://catalog.washburn.edu/undergraduate/school-applied-studies/family-human-services-department/health-services-administration-minor/</a> ) |  |              |
| Public Administration Minor ( <a href="https://catalog.washburn.edu/undergraduate/college-arts-sciences/political-science-public-administration/public-administration-minor/">https://catalog.washburn.edu/undergraduate/college-arts-sciences/political-science-public-administration/public-administration-minor/</a> )                |  |              |
| Subtotal   |  | 15-21        |
| <b>Total Hours</b>   |  | <b>51-57</b> |

<sup>1</sup> If student has already completed a different college math course, please discuss with your advisor.

### TA 210 Technology Survey (3)

Reviews the historical and practical development of technology in a wide variety of settings. Students will learn about the development of technological innovation and the effect on today's society; systems design and analysis; planning and managing a safe environment; tools and techniques to forecast future development in technology; the conflict between technological innovation and resources including local, national and global consequences; using and managing technology in the workplace and at home; and leadership and management in a variety of settings with a technology focus. Prerequisite: none.

### TA 300 Evolution & Development of Technology (3)

This course includes a historical account of the development and innovation of technology. Emphasis is on the development of scientific knowledge and its relationship to inventions, their role in careers and impact on civilization.

### TA 310 Technology & Society (3)

Course will focus on current technology in the context of historical development and the effect of technology on today's society. Students will develop critical analysis of technological innovation through a variety of readings, research and projects.

### TA 320 System Design, Assessment, & Evaluation (3)

This course provides practice in skills to analyze organizational opportunities and evaluates systems using techniques such as flow charts, cause and effect diagrams and others to determine how systems can be utilized to meet organizational challenges. The course will cover such topics as systems planning, analysis, design, testing, implementation and maintenance. Prerequisite: MA 110, or MA 112, or MA 116, or MA 140.

### TA 330 Safety Analysis & Quality Assurance (3)

The purpose of the course is to review the organization of accident prevention programs, job hazards, accident cost control, and planning and maintaining a safe environment. The course includes analysis of data, including the use of statistical process control, risk management, and quality assurance issues such as inspections, reports, and external standards of federal, state and local agencies.

### TA 340 Technology Policy (3)

This course will provide an in-depth study of policy and law practices relating to technology. The course will deal with technology policy, legal ramifications in relation to local environments, state, national and international communities. Consideration in the course will deal with issues such as technological efficiency, socio-economic development, environment, security and others. Special emphasis will be given to the political process in which technology policies are shaped in public and private organization.

### TA 360 Independent Study (1-4)

Technology Administration majors may pursue an independent research project approved by the Program Director in consultation with the Department Chair. Independent Study may not be used in place of any courses required of the TA work major. Independent Study courses must meet equivalencies to Federal definition of a credit hour. Prerequisites: Consent

### TA 370 Technology Internship (1-4)

Provides the opportunity under the direction of a faculty member to gain insight and practical experiences in an area of technology administration.

**TA 380 Technology and the Future (3)**

This course will examine applications of a variety of predication tools and techniques to forecast future developments in their career field. Outcomes will include identification and implementation of strategies to create a desired future in an operation, production or market. Prerequisite: (MA 110 or MA 112 or MA 116) and EN 101.

**TA 381 Technology and Ecology (3)**

The purpose of the course is to examine ecological policy in terms of technology and innovation, including the political, geographical, legal and social contexts in which technological innovation occurs. The course will examine conflicts between innovation and resources, risk assessment, national and global impact, and scale of consequences.

**TA 390 Special Topics in Technology (1-3)**

These special topic courses cover a variety of subjects designed to instill current topics into the technology program.

**TA 400 Technology Administration (3)**

This course provides an introduction to several core concepts in technology management and the role of managers of technology in their respective organizations. The course will cover topics such as technology strategy, effective use of resources, the impacts of technology systems, funding technology and ethical approaches to using and managing technology.

**TA 410 Technology Planning (3)**

This course investigates the increasing use of projects to accomplish organizational goals, including how project plan inputs are accurately gathered, integrated and documented. Topics include project life cycle, work breakdown structure, and the importance of quality, risk, and contingency management in planning development. Prerequisite: None.

**TA 420 Technology Project (3)**

Students working individually and in teams will complete projects as assigned. These projects may take a variety of forms, but will integrate students' technical and professional coursework. Students will be required to produce written and oral presentations of their projects. Evaluation will be based both on individual performance and performance as a team member. Leadership skills will be a critical component of the course. This Capstone project requires summative reflection, serving as a culminating experience for Bachelor's degree students. Prerequisite: TA 300, TA 310, TA 320, TA 330 or concurrent.