

**AERONAUTICAL AND INDUSTRIAL TECHNOLOGY, CONCENTRATION — AVIATION FLIGHT TRAINING ACADEMIC MAP: DEGREE BS**

**(120 CREDIT HOURS)**

This degree map is a semester-by-semester sample course schedule for students majoring in **Aeronautical and Industrial Technology (AIT) with a concentration in Aviation Flight Training**. The milestones listed to the right of each semester are designed to keep a student on track to graduate in four years. The schedule serves as a general guideline to help build a full schedule each semester. Milestones are courses and special requirements necessary for timely progress to complete a major. When one or more milestones are missed, students should consult with an academic advisor to determine if another degree path would be more suitable.

The Aviation Science Programs are designated to provide a coordinated program combining liberal arts, engineering technology, management and industrial technology with a concentration in Aviation Flight Training. This plan of study leads to a Bachelor of Science Degree. Flight training is conducted through affiliate flight training schools located within a ten-mile radius of the Main Campus. Fees for training represent an additional cost to the student and are subject to market driven forces. For a list of affiliate flight schools and related costs, please contact the AIT Department Head.

Academic credit for pilot certificates and ratings will be in accordance with FAR Part 141 or 61 and in accordance with pertinent University policies. Incoming freshman and transfer students must make an appointment with the Departmental Chair in order to have their FAA Certificates properly evaluated and documented.

No student will be allowed to take any Departmental courses, major courses, engineering courses, mathematics and/or science courses without having a successfully completed the proper pre-requisite for those courses. Students earning a grade "D" or lower in a mathematics course(s), or a major course (s) the very next time the course(s) is offered. All "D" grades earned in mathematics, science, departmental or major courses must be repeated the very next time the courses are offered until a minimum grade of "C" is earned. However, students may graduate with a maximum of two "D" grades in these courses.

Tennessee State University recognizes that students have diverse learning, life, and professional experiences. The University provides opportunities for students to earn college credit toward the degree through a number of assessment options that evaluate their learning experiences. These paths are grouped under the category "Prior Learning Assessment" (PLA). Various means of earning PLA credit at TSU are the following: Advanced Placement Program, American Council of Education (ACE) Military Credit, College Level Exam Program (CLEP), DSST Credit by Examination Program (includes DANTES Examination), Institutional Course Challenge Exams (Departmental Exams), International Baccalaureate Credit, Other Military Service, Portfolio Assessment. To learn more about PLA contact your academic advisor or the Office of Student Support Services for Adult and Distance Learners at (615) 963-7001 or [adultstudentsupport@tnstate.edu](mailto:adultstudentsupport@tnstate.edu).

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Department Web Address: <http://www.tnstate.edu/ait/aviationflight.aspx>

Fall Schedule		Milestones
<b>Semester 1</b>	<b>Hrs.</b>	<b>Semester 1</b>
		<b>Lower level courses (1000-2000) must be passed with grade of "C" or better in order to matriculate</b>
UNIV 1000*	1	Minimum Grade of "C" Required
AITT 1001	3	Minimum Grade of "C" Required
ENGL 1010	3	Pre-requisite Course: Must be taken before ENGL 1020, HIST 2010+; Minimum Grade of "C" Required
MATH 1710	3	Pre-requisite Course: Must be taken before MATH 1720; Minimum Grade of "C" Required
HPER or ROTC or BAND**	1	Minimum Grade of "C" Required
Humanities***	3	Minimum Grade of "C" Required
<b>Total Hours</b>	<b>14</b>	

\*An Orientation course taken at another University does not meet this requirement. Transfer students with less than 60 credit hours must take UNIV 1000 at TSU.

\*\*Students may choose a one credit hour course in ROTC-AERO ex. AERO 1021, 2011; and/or Marching Band – ex. MUSC 2010 University Marching Band; and/or any Health, Physical Education, & Recreation – ex. HPER 1010, 1011, 1013, 1032.

\*\*\*Students must take a 3 credit hour course from the list of approved general education Humanities courses: ex. AREN 2310, ART 1010, THTR 1020, MUSC 1010, PHIL 1030, HIST 1000, or RELS 2010. Students must remember not to duplicate a course option from a previous semester. Students must also be sure to not repeat approved general education Humanities courses within the University Honors course sections (ex. ENGL 2310 World Literature and ENGL 2312 Honors World Literature will not satisfy both Humanity electives).

Spring Schedule		Milestones
<b>Semester 2</b>	<b>Hrs.</b>	<b>Semester 2</b>
		<b>Lower level courses (1000-2000) must be passed with grade of "C" or better in order to matriculate</b>
MATH 1720	3	Pre-requisite Course: Must be taken before AITT 3480, PHYS 2010/2011; Minimum Grade of "C" Required
ENGL 1020	3	Pre-requisite Course: Must be taken before HIST 2010+; Minimum Grade of "C" Required
CHEM 1110/1111*	4	Minimum Grade of "C" Required
ECON 2010	3	Pre-requisite Course: Must be taken before MGMT 3010; Minimum Grade of "C" Required
HPER/ROTC/BAND**	1	Minimum Grade of "C" Required

Humanities***	3	Minimum Grade of "C" Required
<b>Total Hours</b>	<b>17</b>	

\*Students must have taken either High School Chemistry earning at least a 75% or CHEM 1000/1001 and two years of High School Algebra before enrolling in CHEM 1110/1111.

\*\*Students may choose a one credit hour course in ROTC-AERO ex. AERO 1021, 2011; and/or Marching Band – ex. MUSC 2010 University Marching Band; and/or any Health, Physical Education, & Recreation – ex. HPER 1010, 1011, 1013, 1032.

\*\*\*Students must take a 3 credit hour course from the list of approved general education Humanities courses: ex. AREN 2310, ART 1010, THTR 1020, MUSC 1010, PHIL 1030, HIST 1000, or RELS 2010. Students must remember not to duplicate a course option from a previous semester. Students must also be sure to not repeat approved general education Humanities courses within the University Honors course sections (ex. ENGL 2310 World Literature and ENGL 2312 Honors World Literature will not satisfy both Humanity electives).

Fall Schedule		Milestones
<b>Semester 3</b>	<b>Hrs.</b>	<b>Semester 3</b>
		<b>Lower level courses (1000-2000) must be passed with grade of "C" or better in order to matriculate.</b>
AITT 2350	3	Co-Requisite Course: Must be taken with AITT 2500, AITT 2531; Pre-requisite Course: Must be taken before AITT 3520, AITT 3550, AITT 3560; Minimum Grade of "C" Required
AITT 2500	3	Co-Requisite Course: Must be taken with AITT 2350, 2531; Pre-requisite Course: Must be taken before AITT 3520, AITT 3550, AITT 3560; Minimum Grade of "C" Required
PHYS 2010/2011	4	Pre-requisite Course: Must be taken before PHYS 2020/2021; Minimum Grade of "C" Required
ENGL 2110*	3	Minimum Grade of "C" Required
HIST 2010**	3	Minimum Grade of "C" Required
AITT 2531***	1	Co-Requisite Course: Must be taken with AITT 2350, AITT 2500; Pre-requisite Course: Must be taken before AITT 3571, AITT 3581, AITT 3601; Minimum Grade of "C" Required; <b>Flight Fees Incurred with this course</b>
<b>Total Hours</b>	<b>17</b>	

\*The department recommends ENGR 2110, however, courses within the range of ENGL 2012 - ENGL 2322 (Sophomore Literature course) will meet this requirement.

\*\*The Department recommends HIST 2010, however, HIST 2020, HIST 2030, HIST 2060, HIST 2070 or HIST 2700 also satisfy this requirement.

\*\*\*Flight fees above 'University Tuition & Fees' incurred with registration of this course – see Chief Flight or Ground Instructor (CFI/CGI) for pricing; AIT flight training takes place at John C. Tune Airport (JWN).

Spring Schedule		Milestones
<b>Semester 4</b>	<b>Hrs.</b>	<b>Semester 4</b>
		<b>Lower level courses (1000-2000) must be passed with grade of "C" or better in order to matriculate.</b>
COMM 2200	3	Minimum Grade of "C" Required
AITT 2532*	1	Minimum Grade of "C" Required; <b>Flight fee incurred with this course</b>
AITT 2533*	1	Pre-requisite Course: Must be taken before AITT 3550, AITT 3571, AITT 3581, AITT 3601; Minimum Grade of "C" Required; <b>Flight fee incurred with this course</b>
PHYS 2020/2021	4	Minimum Grade of "C" Required; Pre-requisite Course: Must be taken before AITT 3700
HIST 2020**	3	Minimum Grade of "C" Required
AITT 3520	3	Pre-requisite Course: Must be taken before AITT 3550, AITT 3560
PSYC 2010	3	Minimum Grade of "C" Required; Pre-requisite Course: Must be taken before AITT 3120
<b>Total Hours</b>	<b>18</b>	<b>Student will have Private Pilot License upon completion of semester four</b>

\*Flight training fees above 'University Tuition & Fees' incurred with registration of this course – see Chief Flight or Ground Instructor (CFI/CGI) for pricing; AIT flight training takes place at John C. Tune Airport (JWN). **Student will hold Private Pilot License (PPL) upon completion of AITT 2533 in order to matriculate properly.**

\*\*The Department recommends HIST 2010, however, HIST 2020, HIST 2030, HIST 2060, HIST 2070 or HIST 2700 also satisfy this requirement.

Fall Schedule		Milestones
<b>Semester 5</b>	<b>Hrs.</b>	<b>Semester 5</b>
AITT 3070	3	
AITT 3120	3	
AITT 3550	3	Pre-requisite Course: Must be taken before AITT 3560, AITT 3601
AITT 3571*	3	Pre-requisite Course: Must be taken before AITT 3560, AITT 3601; <b>Flight Fees Incurred with this Course</b>
<b>Total Hours</b>	<b>12</b>	

\*Flight training fees above 'University Tuition & Fees' incurred with registration of this course – see Chief Flight or Ground Instructor (CFI/CGI) for pricing; AIT flight training takes place at John C. Tune Airport (JWN). **Student will hold Instrument Rating (IFR) upon completion of AITT 3571 in order to matriculate properly.**

Spring Schedule		Milestones
<b>Semester 6</b>	<b>Hrs.</b>	<b>Semester 6</b>
ENGL 3105	3	Pre-requisite Course: Must be taken before ENGR 4500
AITT 3581*	3	Pre-requisite Course: Must be taken before AITT 3560, AITT 3601; <b>Flight Fees Incurred with this Course.</b>
AITT 3700	3	
AITT 3950	3	
AITT 3480	3	
<b>Total Hours</b>	<b>15</b>	<b>Student will have Commercial Pilot License with Instrument Rating upon completion of semester six</b>

\*Flight training fees above 'University Tuition & Fees' incurred with registration of this course – see Chief Flight or Ground Instructor (CFI/CGI) for pricing; AIT flight training takes place at John C. Tune Airport (JWN). **Student will hold Commercial Pilot License (CPL) upon completion of AITT 3581 in order to matriculate properly.**

Fall Schedule		Milestones
<b>Semester 7</b>	<b>Hrs.</b>	<b>Semester 7</b>
AITT 3560*	3	Co-Requisite Course: Must be taken with AITT 3601
ENGR 4500**	1	
ENGR 4900**	1	
AITT 3601*	2	Co-Requisite Course: Must be taken with AITT 3560; <b>Flight Fees Incurred with this Course</b>
AITT 3810	3	
MGMT 3010	3	
<b>Total Hours</b>	<b>13</b>	<b>Student will have Flight Instructor with Instrument Rating Certification upon completion of semester seven</b>

\*Flight fees above 'University Tuition & Fees' incurred with registration of this course – see Chief Flight or Ground Instructor (CFI/CGI) for pricing; AIT flight training takes place at John C. Tune Airport (JWN). **Student will hold Certified Flight Instructor with Instrument Rating (CFII) credentials upon completion of AITT 3601 in order to gain employment in the Aeronautics Industry.**

\*\*Must be a graduating senior to enroll in these courses: ENGR 4500 and ENGR 4900.

Spring Schedule		Milestones
<b>Semester 8</b>	<b>Hrs.</b>	<b>Semester 8</b>
		<b>Take Senior Exit Exam and Apply For Graduation</b>
ENGR 4510*	1	
MGMT 4050	3	
AITT 3900	3	
AITT 4400	3	
3000-4000 TECH/NON-TECH ELEC**	4	
<b>Total Hours</b>	<b>14</b>	

\*Must be a graduating senior to enroll in this course: ENGR 4510.

\*\*Any Technical or Non-Technical course elective(s) may be chosen from the 3000-4000 (junior-senior level) course(s) to total 4 credit hours being offered within the schedule of course listings from Tennessee State University; these courses may include: ex. AITT 3110, AITT 4020, AITT 3311, AITT 3351. Upper level substitutions may be used from outside institutions (Minimum transfer grade of "C" required for substitutions).

#### **Employment Information:**

The Aviation Science Programs are designated to provide a coordinated program combining liberal arts, engineering technology, management and industrial technology with a concentration in Flight Training or Aviation Management. These concentrations lead to a Bachelor of Science Degree. Students interested in future positions in industry-related aviation, especially as either pilots or as managers, will benefit from these concentrations. Tennessee State University is recognized by the Federal Aviation Administration as an Aviation Education Resource Center. Additionally, the University holds an FAR Part 141 Air Agency Certificate (TUOS674K) from the Federal Aviation Administration to conduct pilot ground school training. Flight training is conducted through affiliate flight training schools located within a ten-mile radius of the main campus. Flight fees represent an additional cost to the student and are subject to market driven forces. For a list of affiliate flight schools and related costs, please contact the AIT Department Head. Academic credit for pilot certificates and ratings will be in accordance with FAR Part 141 or 61 and in accordance with pertinent University policies. Incoming freshman and transfer students must make an appointment with the Departmental Chair in order to have their FAA Certificates properly evaluated and documented.

#### **Representative Job Titles Related to this Major:**

Flight Instructor, Commercial Pilot, Human Factors Engineer, Aviation Safety Inspector and System Safety Analyst

#### **Representative Employers:**

Cessna Aircraft Corporation, Piper Aircraft Corporation, United States Air Force, Federal Aviation Administration, Metro Nashville Airport Authority, Spirit Airlines, The Boeing Company

Students interested in future positions in industry-related aviation, especially pilots will benefit from this. Tennessee State University is recognized by the Federal Aviation Administration as an Aviation Education Resource Center. Additionally, the University holds an FAR Part 141 Air Agency Certificate (TUOS674K) from the Federal Aviation Administration to conduct pilot ground school training.

**International study is available for all TSU students and may include opportunities for internships or taking course work towards various minors.** International study may have an impact on the academic map; therefore, it is important to consult with the academic advisor for this major before participating in an international Program opportunity. Students interested in study abroad opportunities should contact the Office of International Programs and consult with their academic advisor.

### Launch My Career Tennessee

To better assist you in making decisions about the career for which you are preparing, a link to the website, Launch My Career Tennessee has been provided for you to explore. The tools on the site will give you a wealth of information concerning your degree choice and possible career pathways. For example, the site will allow you to determine the return on the investment you are making in your education by estimating expected earnings over the course of your career. Begin charting your course by clicking on the link below.

<http://launchmycareertn.org/>

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This map is not intended to be a contract; either expressed or implied, between the University and the students, but represents a flexible program of the current curriculum which may be altered from time to time to carry out the academic objectives of the University. TSU specifically reserves the right to change, delete or add to any MAP at any time within the student's period of study at the University.