



**CMU Tech Curriculum Committee
Meeting Minutes
April 8, 2025
Kayenta Hall 150**

Members Present: Wayne Smith, Carolyn Ferreira-Lillo, Jason Roberson, Stephanie Stelljes, Karrie Stanfill, and Olga Grisak

Ex-officio members present: Kelly Reuss and Tracie Seurer

Recording Secretary: Lisa Bessette

Chair Smith called the meeting to order at 4:04 pm.

I. Announcements

A. None.

II. Ex-Officio Reports

A. Associate Vice President of Academic Affairs for Assessment and Accreditation

i. No update.

B. Registrar's Office

i. No update.

C. Financial Aid Associate Director Stewart

i. No update.

D. Librarian Seurer

i. No update.

E. Catalog Description Reviewer Varner

i. No update.

F. Essential Learning Scott Andrews

i. No update.

III. Old Business

A. None.

IV. Curriculum Proposals

A. Curriculum proposals begin on page 3.

V. Information Items

A. None.

VI. New Business

A. Chair Smith asked for nominations or volunteers for committee officers for academic year 2025-2026. After some discussion, Jason Roberson volunteered for Chair and Carolyn Ferreira-Lillo volunteered for Vice Chair. The committee unanimously voted to elect both Jason and Carolyn for the positions for 2025-2026.

- B. The following update for the Curriculum Manual proposed by UCC was discussed:
To help ensure inclusion of prerequisite courses, to allow for smoother transitions from Associate to Bachelor programs, and to more accurately reflect current practices, the committee voted to accept the following UCC proposed change to the curriculum manual:

Current:

7. For Associate programs, all courses and hours specified by a department must be included in the Major. For Bachelor programs, all courses and hours specified by a department must be included in the Major or in the Foundation Courses. Exemptions for PTO programs to name essential learning courses are explained in IV.C.2.f.

Proposed:

7. For Associate and Bachelor programs, all courses and hours specified by a department must be included in the Major or in the Foundation Courses. Exemptions for PTO programs to name essential learning courses are explained in IV.C.2.f.

This modified verbiage will be voted on during the first curriculum meeting of the 2025-2026 academic year.

VII. Adjourn

Ferreira-Lillo motioned to adjourn and with no objections from the committee, Chair Smith adjourned the meeting at 4:43 pm.



CMU Tech CC Proposals April 8, 2025

Effective Term - Summer 2025		Programs	
The following is a summary: Additional information can be found on the individual curriculum proposals.			
Program	Degree	Committee Action	Motion Second
1334: Land Surveying and Geomatics	AAS	Program Modification - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: 1.) Content from the MATH 141: Analytical Geometry course is beneficial to the Land Surveying program however there is not enough demand to run that course and it has not been offered for more than 6 years. Topics from Analytical Geometry such as vectors and equations of planes in 3D are useful to students in the program. So, a new course, MATH 114: Trigonometry and Analytic Geometry was created. The content in MATH 114 will eliminate some of the analytical trigonometry topics from the MATH 130: Trigonometry course, such as proving trig identities, in favor of analytical geometry topics. Additionally, the trigonometry topics will have a stronger emphasis on applications. These changes ae beneficial for surveying students who do not have the opportunity to take a full Analytical Geometry course. 2.) The footnote is to help students understand that a higher math class can be used for the requirement but that there are other requirements that must be met for the certification and that a course like calculus, for instance, which is also listed in the program cannot double count.			
Change Item Description		Department Justification	
List all proposed changes to the program:		1. Include MATH 114: Trigonometry and Analytic Geometry as an alternative to the MATH 130: Trigonometry requirement. 2. Add a footnote addressing "or higher" for the math course.	
: Airframe and Powerplant Mechanic	AAS	Program Addition - Approved	Stelljes Roberson
CMU Tech CC Discussion: The A&P Mechanic Program intends to prepare students to develop skills required to enter a high demand industry, to help alleviate the nationwide shortage of aircraft mechanics. This program will allow hands on experience for students to learn all aspects of an aircraft and develop skills to diagnose, repair and install items on various different types of aircraft. The aviation industry is constantly advancing and the A&P program will allow CMU Tech the opportunity to create new and innovative curriculum to prepare our students for success in the industry.			
Change Item Description		Department Justification	
New program proposal		See CMU Tech CC discussion.	
: Digital Filmmaking: Writing/Directing Principles I	TCT	Program Addition - Approved	Roberson Stanfill
CMU Tech CC Discussion: Digital Filmmaking has been making multiple changes to their program due to changing industry needs. This new certificate is an attempt to provide a set of skills for students interested in entering this industry and replaces Writing/Direction Elements. Since more than 50% of the courses were changed from the Writing/Directing Elements Certificate, a new Certificate had to be			

created. However, while a new Certificate, it is simply replacing the Writing/Directing Elements Certificate.

Change Item Description

New program proposal

Department Justification

See CMU Tech CC discussion.

**: Digital Filmmaking:
Writing/Directing
Principles II**

TCT

**Program Addition -
Approved**

Roberson | Stanfill

CMU Tech CC Discussion: Digital Filmmaking has been making multiple changes to their program due to changing industry needs. This new certificate is an attempt to provide a set of skills for students interested in entering this industry and replaces Writing/Direction Basic. Since more than 50% of the courses were changed from the Writing/Directing Basic Certificate, a new Certificate had to be created. However, while a new Certificate, it is simply replacing the Writing/Directing Basic Certificate.

Change Item Description

New program proposal

Department Justification

See CMU Tech CC discussion.

**: Digital Filmmaking:
Writing/Directing
Principles III**

TCT

**Program Addition -
Approved**

Roberson | Stanfill

CMU Tech CC Discussion: Digital Filmmaking has been making multiple changes to their program due to changing industry needs. This new certificate is an attempt to provide a set of skills for students interested in entering this industry and replaces Writing/Direction Intermediate. Since more than 50% of the courses were changed from the Writing/Directing Intermediate Certificate, a new Certificate had to be created. However, while a new Certificate, it is simply replacing the Writing/Directing Intermediate Certificate.

Change Item Description

New program proposal

Department Justification

See CMU Tech CC discussion.

Effective Term - Summer 2025

Courses

The following is a summary: Additional information can be found on the individual curriculum proposals.

Title

Credits

Committee Action

Motion | Second

**APMT 101: Introduction
to Airframe and
Powerplant Mechanic**

4

**Course Addition -
Approved**

Roberson | Ferreira-Lillo

CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and covers basic subjects, such as mathematics, physics and aircraft drawings.

Change Item Description

New Proposal: No differences to report

Old

New

APMT 102: Regulations and Computations	4	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and covers aircraft weight and balance theory and the performance of weight and balance calculations and the requirements for ground handling, servicing, taxiing, and towing aircraft.			
Change Item Description		Old	New
New Proposal: No differences to report			
APMT 103: Aircraft Materials I	4	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations with a focus on aircraft structures, materials, and hardware, use of precision measuring tools, and methods of non-destructive testing. The course emphasizes causes of corrosion and methods to prevent and treat corrosion and covers construction of rigid and flexible aircraft fluid lines. There is also a focus on application, maintenance and repair of aircraft structural wood and fabric covering materials, and the application and maintenance of protective finishes.			
Change Item Description		Old	New
New Proposal: No differences to report			
APMT 104: Aircraft Systems for Airframe & Powerplant I	4	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and emphasizes aircraft flight instrument theory and operation and the inspection, maintenance, and installation requirements for these systems. The course also focuses on the operation of aircraft fuel systems and the procedures utilized in inspecting, troubleshooting, and maintaining these systems.			
Change Item Description		Old	New
New Proposal: No differences to report			
APMT 111: Electrical Systems in Aircraft	4	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and covers Introduction to basic AC (alternating current) and DC (direct current) electric theory as applied to aircraft systems. The course focuses on the operation, troubleshooting, and repair of aircraft electrical systems with emphasis on alternators, motors, lighting systems, and wiring as well as control and circuit protection devices for each and studies alternating current, capacitive and inductive circuits with emphasis on solid state and optical electric devices and electric systems that apply to engine operation with emphasis on starting and generating systems and includes the pressure, temperature, position, and speed indicating instruments that pertain to engine operation.			
Change Item Description		Old	New
New Proposal: No differences to report			

APMT 113: Aircraft Materials II	4	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and covers characteristics of various aluminum alloys, the procedures and precautions used when working with them, the selection of appropriate hardware, and the principles of making repairs to aluminum structures. The course focuses on varieties and methods of working with aircraft steel and the principles of soldering, silver soldering, gas arc and heliarc welding and emphasizes gas welding of thin wall steel tubing. The course also focuses on materials and principles of aircraft control rigging and the replacement of structural aircraft components and performs 100-hour and special inspections. Introduction to composite materials as applied to aircraft construction and the maintenance and repair of items made of these materials is also covered.			
Change Item Description		Old	New
New Proposal: No differences to report			
APMT 114: Aircraft Systems for Airframe & Powerplant II	4	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations with a focus on hydraulic principles, hydraulic fluids, system components, and operation of hydraulic and pneumatic systems. The course studies airframe systems including communication, navigation, fire warning and extinguishing, and cabin atmospheric control systems and focuses on operation, troubleshooting, and repair of aircraft landing gear systems.			
Change Item Description		Old	New
New Proposal: No differences to report			
APMT 118: Systems Troubleshooting	1	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and introduces students to principles of troubleshooting and a method of analyzing problems assisting students to better understand aircraft systems and extend the principles to troubleshooting of complex aircraft systems.			
Change Item Description		Old	New
New Proposal: No differences to report			
APMT 205: Reciprocating Engines I	4	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and emphasizes the theory, operating principles, and construction features of aircraft reciprocating engines. The course also reviews aircraft fuel delivery system components and operating principles and studies carburetor and fuel injection system controls that meter fuel to the engine.			
Change Item Description		Old	New
New Proposal: No differences to report			

APMT 206: Reciprocating Engines II	4	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and is an introduction to aircraft piston engine ignition systems, including classifications, components, theory, starting systems, maintenance, servicing, and repair. The course is designed for the second-year student working toward the FAA Powerplant rating. The course focuses on engine maintenance and overhaul procedures and includes an actual engine overhaul. The course also introduces the study of aircraft propellers including fixed pitch, constant speed, feathering, reversing, and de-icing systems.			
Change Item Description		Old	New
New Proposal: No differences to report			
APMT 215: Turbine Engines I	4	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and studies turbine engine fuel delivery, fuel control operation, fuel control design, and maintenance procedures and turbine engine fuel delivery, fuel control operation, fuel control design, and maintenance procedures. The course also covers turbo-prop system components, operations, and maintenance, including operation of a feathering and reversing turbo-prop.			
Change Item Description		Old	New
New Proposal: No differences to report			
APMT 216: Turbine Engines II	4	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and studies turbine engine starting, ignition, instrument, and fire protection systems, and the maintenance of these systems with a focus on maintenance and inspection practices pertaining to turbine aircraft engines.			
Change Item Description		Old	New
New Proposal: No differences to report			
APMT 218: Engine Troubleshooting	1	Course Addition - Approved	Roberson Ferreira-Lillo
CMU Tech CC Discussion: Meets FAA requirements for students to pass FAA Airframe and Powerplant examinations and is an introduction to principles of troubleshooting and a method of analyzing problems with a focus on better understanding of aircraft systems and extends the principles to troubleshooting of complex aircraft systems.			
Change Item Description		Old	New
New Proposal: No differences to report			