From: Smith, Randy

To: Gerber, Carri; Osborne, Jeanne

Cc: Sutherland, Sue; Reed, Katie; Smith, Randy; Hunt, Ryan; Duffy, Lisa; Boone, Kristina; Christy, Ann

Subject: Proposal to revise the Power Equipment AAS and corresponding deactivation of the Hydraulic Power and Motion

Control AAS

Date: Thursday, March 20, 2025 3:13:56 PM

Attachments: <u>image001.png</u>

Carri and Jeanne:

The proposal from Ohio State ATI to revise the Power Equipment Associate of Applied Science (AAS) and corresponding deactivation of the Hydraulic Power and Motion Control AAS was approved by the Council on Academic Affairs at its meeting on March 19, 2025. Thank you for attending the meeting to respond to questions/comments.

No additional level of internal review/approval is necessary. This action will be included in the Council's next <u>Annual Activities Report</u> to the University Senate (July 2025).

The Office of the University Registrar will work you with any implementation issues.

Please keep a copy of this message for your file on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions please contact the Chair of the Council, Professor Sue Sutherland. (43), or me.

Randy



W. Randy Smith, Ph.D.

Vice Provost for Academic Programs

Office of Academic Affairs

University Square South, 15 E. 15th Avenue, Columbus, OH 43201 614-292-5881 Office

smith.70@osu.edu

Assisted by:

Katie Reed

Executive Assistant (614) 292-5672

From: Osborne, Jeanne
To: Smith, Randy

Cc: Reed, Katie; Violet, Cynthia; Lewandowski, Monica; Gerber, Carri

Subject: Requesting CAA Approval for revision to the Power Equipment AAS and corresponding deactivation of the

Hydraulic Power and Motion Control AAS

Date:Wednesday, March 5, 2025 11:57:33 AMAttachments:POWEREO-AA combined files Feb 3.pdf

image001.png

Dear Dr. Smith,

The College of Food, Agricultural, and Environmental Sciences is requesting Council on Academic Affairs approval for revision to the current Power Equipment AAS and corresponding deactivation of the Hydraulic Power and Motion Control AAS, as summarized below and outlined in the attached proposal.

The proposed changes to the Power Equipment AAS and proposed deactivation of the Hydraulic Power and Motion Control AAS are made after an industry needs assessment was conducted and in consultation with the program's advisory committee. These proposed changes to the current Power Equipment AAS include: a name change (to Power and Hydraulic Engineering Technologies AAS), course updates (in progress of approval at the OUR), inclusion of hydraulic power in program goals, and a reduction in the number of hours from 63 to 61. The revision eliminates redundancy between the proposed revised and proposed deactivated majors, and supports students interested in entering the industries supported by the majors – currently many students double major between the two existing programs to obtain the skills and knowledge needed to be competitive in the workforce. Current students will not be affected by these changes and any course offering changes will be managed by petition to ensure students' progress to graduation.

This proposal has been approved by the Academic Affairs Committee of the Ohio State Agricultural Technical Institute (ATI) - Wooster and the CFAES Committee on Academic Affairs. In addition, deactivation of the Hydraulic Power and Motion Control AAS was approved by the faculty of Ohio State ATI - Wooster. Please let me know if any additional information is needed in support of this request.

Sincerely,

Jeanne



Jeanne M. Osborne | Pronouns: She, Her, Hers

Assistant Dean for Academic Affairs College of Food, Agricultural, and Environmental Sciences 100E Agricultural Administration, 2120 Fyffe Rd. Columbus, OH 43210

Tel: 614-292-1734 Fax: 614-292-1218 e-mail: Osborne.2@osu.edu

'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change' (Bob Kerrey)





CFAES Wooster / Ohio State ATI

1328 Dover Road Wooster, OH 44691-4000

330-287-1331 Phone

ati.osu.edu

January 31, 2025

Ms. Jeanne Osborne Assistant Dean for Academic Programs 100E Agricultural Administration Building 2120 Fyffe Rd Columbus, OH 43210

Dear Ms. Osborne.

Enclosed please find the proposed revision to the program name, curriculum plan, and course sequence for the Associate of Applied Science Power and Hydraulic Engineering Technologies program and deactivation of the Associate of Applied Science Hydraulic Power and Motion Control program submitted for consideration by the FAES Academic Affairs Committee.

In 2023, Ohio State ATI began a systematic review of the Associate of Applied Science programs with the goals of:

- 1. Updating the approved list of General Education and Applied Education courses;
- 2. Reducing the number of programs and courses offered on the Wooster campus; thus reducing the need for associated faculty;
- 3. Updating programs to current industry standards;
- 4. Keeping total credit hours closer to 60 rather than 64, allowing room for supplemental courses (e.g. English 1193) thus reducing time to degree; and
- 5. Incorporating the zero-credit hour internship course in the summer.

In a response to the call for curriculum review, program coordinator, Mr. Robby Frutchey, in consultation with the program's advisory committee, revised the Associate of Applied Science Power Equipment program. Changes include, a name change, course updates (previously submitted), inclusion of hydraulic power in program goals, and a reduction in the number of hours from 63 to 61. Mr. Frutchey provided the following rationale for the curricular change:

Mr. Robby Frutchey conducted a needs assessment of the industry for the Power Equipment and Hydraulic Power Motion Control Associate of Applied Science programs. Based off the data collected, industry stakeholders noted the extensive overlap between the programs. [Current practice – many students double major as the two programs differed in only 5 courses.] Based on this and guidance of the advisory committee, Mr. Frutchey completed an analysis of the program goals and course goals between the two programs. When comparing the individual courses, he noted redundancy of content within each program and overlap between programs. When the redundancy was removed and overlap reduced, a single, more robust program emerged using the base of the current Power Equipment Associate of Applied Science. The advisory committee supported moving forward with one program and suggested changing the name to include the word "engineering". After much discussion with industry stakeholders, the proposed name of the Associate of Applied Science program is "Power and Hydraulic Engineering Technologies".

When comparing the goals of the current Power Equipment program with the proposed Power and Hydraulic Engineering Technologies program, there is far less than 50% change and, therefore, it is not a

substantive change. The edits to the proposed goals include the addition of hydraulics and inclusion of industry verbiage to correspond to embedded certificates:

	Current vs. Proposed Program (Goals
Current	Rationale	Proposed
Understand engineering principles related to the power equipment industry	Addition of "hydraulic"	Understand engineering principles related to power and hydraulic industries
Understand the use of components and mechanisms at the systems level	Expanded current goal to include verbiage included in industry certificates	Understand modern power unit components and mechanisms with a focus on operation, diagnostics, safety, maintenance, and advanced repair technologies
Understand how to evaluate and optimize the performance of power equipment systems	Expanded current goal to include verbiage included in industry certificates	Understand electrical systems with a focus on schematics, troubleshooting, maintenance, diagnostics, for effective power units and hydraulic repairs
Become proficient with communicating technical information to effectively work in the power equipment industry	Expanded current goal to include verbiage included in industry certificates	Demonstrate safety, learning, communication, and professionalism in the power and hydraulic engineering field

To bring the program to current practice with substitutions and include the new/revised courses, the proposed curricular changes are as follows:

General Education - Social/Behavioral Sciences or Arts and Humanities

Remove choice list: PSYCH 1100 - Introduction to Psychology

RURLSOC 1500 - Introduction to Rural Sociology (no longer offered)

HISTORY 1152 - American History since 1877 MUSIC 2250 – Music Cultures of the World

RELSTDS 2370 - Introduction to Comparative Religion

Add AEDECON 2001 - Principles of Food and Resource Economics - (aligns with college requirement)

General Education - Natural Science

Remove TECHPHYS 1150T (5 credits) - Technical Physics (will be withdrawn)

Add ASM 2150 (4 credits) - Applied Agricultural Mechanics and Electronics – (new class)

[ASM 2150 reduces credit hours and increases the focus on engineering examples to apply the physics concepts.]

Applied General education

Remove BUSTECH 1151T - General Economics - (no longer offered; current substitution course

AEDECON 2001 moved to Social/Behavioral Sciences or Arts and Humanities category)

Remove ENGTECH 2092T - Problem Solving: Career and Society Applications (no longer offered)

Remove ENGTECH 2322T - Basic Electricity and Electronics

Replace with equivalent course ENGTECH 2609T - Basic Electricity and Electronics

Remove ENGTECH 2331T - Distributor Management - (no longer offered)

Add BUSTECH 2241T - Small Business Management - (current practice substitution)

Add ENGTECH 2608T - Applied Computer Aided Design

Technical studies

Add GENSTDS 3191T - Conducting Your Internship in the College of Food, Agricultural, and

Environmental Sciences OSU ATI

Add ENGTECH 2613T - Electrohydraulics and System Design

Remove/Replace The following courses from the current program will be removed and will be replaced with updated equivalent courses:

Current Courses	Proposed Courses
ENGTECH 2214T - Fundamentals of Fluid Power and	ENGTECH 2612T - Fundamentals of Fluid Power
Components	and Components
ENGTECH 2224T - Fluids, Filtration, and Fluid	ENGTECH 2610T - Components and Fluid Circuits
Conveyance	
ENGTECH 2312T - Engineering Technology	ENGTECH 2602T - Workplace Safety
Fundamentals	ENGTECH 2603T - Precision Tools
ENGTECH 2314T - Introduction to Power Equipment	ENGTECH 2611T - Small Engine Basics
ENGTECH 2324T - Engine Diagnosis and Repair	ENGTECH 2604T - Introduction to Power Units
ENGTECH 2336T - Methods of Power Transmission	ENGTECH 2605T - Transmission and Components
ENGTECH 2334T - Vehicle Electrical and Electronic	
Systems	ENGTECH 2606T - Power Units and Components
ENGTECH 2338T - Diesel Engine Systems	
ENGTECH 2348T - Performance of Mobile Power	ENGTECH 2607T - Power Application and
Units	Performance

The proposed changes to the name, curriculum plan, and course sequence for the Associate of Applied Science Power and Hydraulic Engineering Technologies program were approved by the Plant Science and Engineering Technologies Division at Ohio State ATI and the Ohio State ATI Academic Affairs committee.

Ohio State ATI is committed to protecting the academic progress of students. This program change will not disrupt progress toward degree for students enrolled in this degree program. Course substitutions and manual management of the degree audits will occur as needed for students enrolled in this degree program during the transition. When appropriate, coursework completed by students under the current degree program will be utilized for completion of the proposed degree program.

Additionally, we request the **deactivation of the Associate of Applied Science Hydraulic Power and Motion Control program effective Autumn 2025**. The deactivation was approved by the Plant Science and Engineering Technologies Division, Ohio State ATI Academic Affairs committee, and the faculty at Ohio State ATI.

Current enrollment in the Hydraulic Power and Motion Control program consists of:

- 3 students second-year Hydraulic Power and Motion Control program
- 3 students second-year Hydraulic Power and Motion Control and Power Equipment dual major
- 1 student third-year Hydraulic Power and Motion Control and Power Equipment dual major

3 of the 7 students have applied for SP25 graduation. No new students will be enrolled. This proposed program deactivation will not disrupt progress toward degree. Working closely with a faculty advisor and the Ohio State ATI academic affairs office, the students who are currently enrolled can complete an Associate of Applied Science degree by successfully completing the remaining courses and labs (using substitutions of the current or newly revised courses if necessary).

Deactivating the Hydraulic Power and Motion Control program will have little impact on Ohio State ATI. Incoming students will be directed to the updated Associate of Applied Science Power and Hydraulic Engineering Technologies program. The 5 unique Hydraulic Power and Motion Control courses will be deactivated.

Enclosed please find the following documents:

- Current curriculum plan and course sequence for the Associate of Applied Science Associate of Applied Science Power and Hydraulic Engineering Technologies program.
- Proposed curriculum plan and course sequence for the Associate of Applied Science Associate of Applied Science Power and Hydraulic Engineering Technologies program.

Please let me know if there are questions, or if additional information or documentation is required to accompany this submission. We look forward to hearing from the FAES Academic Affairs Committee regarding next steps in the approval process.

Sincerely,

CarriAGerber

Carri A. Gerber, Ph.D. Associate Director, Ohio State ATI

OHIO STATE ATI ASSOCIATE OF APPLIED SCIENCE DEGREE NON-TECHNICAL COURSE OPTIONS BY CATEGORY* (Effective SP2025)

GENERAL EDUCATION

Those courses in written and oral communication, quantitative principles, biological and physical sciences, social and behavior sciences and the arts and humanities that provide the foundation and common experience expected among individuals holding associate and baccalaureate degrees. These courses, along with courses skills.

English Composition / Oral Communication

AGRCOMM 3130 - Oral Expression in Agriculture

ENGLISH1110.01 - REQUIRED - First-Year English Composition

Mathematics / Statistics and Logic

COMLDR 3537 - Data Analysis in the Applied Sciences

GENMATH 1141T - Business Mathematics

GENMATH 1145T - Technical Mathematics

MATH 1148 - College Algebra

MATH 1149 - Trigonometry

MATH 1150 - Precalculus

MATH 1151 - Calculus I

Arts and Humanities

COMLDR 3535 - Historical and Cultural Studies

COMPSTD 2301 - Introduction to World Literature

HISTORY 1152 - American History since 1877

MUSIC 2250 - Music Culture of the World

RELSTDS 2370 - Introductions to Comparative Religion

Social and Behavioral Sciences

AEDECON 2001 - Principles of Food and Resource Economics

ENR 2300 - Society and Natural Resources PSYCH 1100 - Introduction to Psychology

Natural Sciences

ANIMSCI 2200.01 - Introductory Animal Sciences

ANMLTEC 3140T - Anatomy and Physiology

ASM 2150 - Applied Agricultural Mechanics and Electronics

BIOLOGY 1101 - Introductory Biology

BIOLOGY 1113.01 - Bio Sci: Energy Transfer & Dev.

BIOLOGY 1114.01 - Bio Sci: Form, Function, Diversity and Ecology

CHEM 1110 - Elementary Chemistry CHEM 1210 - General Chemistry 1

CHEM 1220 - General Chemistry II

CRPSOIL 2300T and 2301T Introduction to Soil Science/Intro Lab

ENR 2100 - Intro. to Environmental Science

GENBIOL 1250T - General Botany with Applications

GENCHEM 1100T - Introduction to General Chemistry

HCS 2202 - Form and Function in Cultivated Plants

MICRBIOL 4000.01 - Basic and Practical Microbiology

PHYSICS 1200 - Mechanics, Kinematics, Fluids, Waves

TECPHYS 1150T - Technical Physics

*May also be used as a technical studies course but can only be used once.

APPLIED GENERAL EDUCATION

Those courses within applied associate degrees that emphasize the application of general education to an occupational or technical area Courses such as technical communication, business mathematics, calculations for health professionals, study skills, applied computing. and practical psychology are examples that fall in this category. Applied general education within a major, provide opportunities for critical thinking, problem solving and analytic coursework cannot be counted toward meeting the minimum requirements for general education courses in associate or baccalaureate degrees (i.e., 15 semester hours in applied associate degree programs and 36 semester hours in associate of arts, associate of science and bachelor's degrees).

English Composition / Oral Communication

AGRCOMM 2330 - Public Perceptions of Agricultural and Environmental Issues ENR 2367 - Communicating Environmental and Natural Resources Information GENCOMM 2115T - Technical and Business Writing

Business

AEDECON 2105 - Managerial Records and Analysis

ANMLTEC 3800T - Principles of Farm Business Management

BUSTEC 1202T - Software Applications

BUSTEC 2231T - Fundamentals of Marketing

BUSTEC 2232T - Personal Selling

BUSTEC 2240T - Introduction to Project Management

BUSTEC 2241T - Small Business Management

BUSTEC 2244T - Human Resource Management and Leadership

BUSTEC 2247T - Business Law

BUSTEC 2249T - Fundamentals of Business Finance

CRPSOIL 3800T - Principles of Farm Business Management

HORTTEC 2260T - Sports Turf Operations Organization and Management

HORTTEC 2270T - Golf Course Organization and Management

Social and Behavioral Sciences

GENSSC 1181T - Hispanic Culture and Language in the Workplace

Applied Sciences

ANIMSCI 2200.03 - Animal Systems

ANMLTEC 2201T - Introduction to Horse Science

ANMLTEC 2603T - Swine Production and Management I

ANMLTEC 2200.02T - Introduction to Animal Science Laboratory

ANMLTEC 2202T - Introduction to Beef and Small Ruminant Production

ANMLTEC 3150T - Livestock Genetic Improvement ANMLTEC 3157T - Dairy Cattle Genetic Improvement

BIOTECH 2218T - General and Applied Entomology

CRPSOIL 2422T - Weed Control Technology

ENGTECH 2121T - Drafting & Computer-Aided Design

ENGTECH 2310T - Building Science: Electrical and Lighting Systems

ENGTECH 2322T - Basic Electricity and Electronics

ENGTECH 2345T - Building Science: Mechanical Systems ENR 3100 - Introduction to Sustainable Agriculture

HCS 2204 - Ecology of Managed Plant Systems

HCS 2205 - Ecology of Managed Plant Systems Lab

HORTTEC 2110T - Plant Materials I

HORTTEC 2120T - Plant Materials II

HORTTEC 2500T - Greenhouse Environment Control

HORTTEC 2740T - Plant Propagation

HORTTEC 2819T - Pesticides and their Use

HORTTEC 2880T - Principles of Weed Science

HORTTEC 2890T - Plant Diseases of Ornamentals and Turf

ASSOCIATE OF APPLIED SCIENCE DEGREE POWER EQUIPMENT CURRICULUM PLAN

CURRENT

Ohio State ATI		Major: Power Equipment	
Non-Technical Studies		Non-Technical Studies	
General Education	Sem Cr	General Education	Sem Cr.
Category		Course	
ENGLISH COMPOSITION/	3	ENGLISH 1110.01	3
ORAL COMMUNICATION		Elveriell Illowi	
ENGLISH 1110.01			
MATHEMATICS/STATISTICS AND	3	GENMATH 1145T	3
LOGIC			
SOCIAL/BEHAVIORAL SCIENCES	3	Choose 1 of the following:	3
OR ARTS AND HUMANITIES		PSYCH 1100 or RURLSOC 1500 or	
		HISTORY 1152 or MUSIC 2250 or	
		RELSTDS 2370	
		1625125 2570	
NATURAL SCIENCES	3	TECPHYS 1150T	5
From any of the General Education	3	AGRCOMM 3130	3
categories (listed above)			
Total General	min. 15	Total General	17
Applied General Education		Applied General Education	
Courses determined by program from the		BUSTEC 1151T	3
following:		BUSTEC 1202T	1
-		ENGTECH 2092T	2
General Education categories		ENGTECH 2322T	
Applied Sciences		ENGTECH 2331T	3 2
Business		GENCOMM 2115T	3
COLLEGE/CAREER	1	GENSTDS 1201.01T	0.5
ORIENTATION		ENGTECH 1201.01T	0.5
Total Non-Technical Studies	min.	Total Non-Technical Studies	32
	½ degree		
	total credits		
Technical Studies		Technical Studies	
Industry/Practical Experience		ENGTECH 2191.03T	3
3 (min)- 9 (max) [min 2 cr internship]			
Other courses determined by program		ENGTECH 2214T	4
		ENGTECH 2224T	2
		ENGTECH 2240T	3
		ENGTECH 2312T	3
		ENGTECH 2314T	3
		ENGTECH 2324T	3
		ENGTECH 2332T	1
		ENGTECH 2334T	2
		ENGTECH 2336T	2
		ENGTECH 2338T	3
		ENGTECH 2348T	2
Technical Studies Total	max.	Technical Studies Total	31
	½ degree		
	total credits		
DEGREE TOTAL	60-65	DEGREE TOTAL	63

Power Equipment Associate of Applied Science

Current

E-Year English Composition Iloring Engineering Technologies Idamentals of Fluid Power and Components Ineering Technology Fundamentals Induction to Power Equipment Innical Mathematics Induction Ind	3 .5 4 3 3 3 .5 17 17 15 15 15 15 15 15 15 15 15 15 15 15 15
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sel Engine Systems	<u>3</u>
<i>5</i>	13
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2 or MUSIC 2250 or RELSTDS 2370	15
111111111111111111111111111111111111111	chods of Power Transmission sel Engine Systems Il Expression in Agriculture day, Filtration, and Fluid Conveyance tributor Management formance of Mobile Power Units thnical and Business Writing pose 1 of the following courses: ICH 1100 or RURLSOC 1500 or HISTORY 2 or MUSIC 2250 or RELSTDS 2370

ASSOCIATE OF APPLIED SCIENCE DEGREE POWER EQUIPMENT POWER and HYDRAULIC ENGINEERING TECHNOLOGIES CURRICULUM PLAN

Proposed with highlighted changes

Ohio State ATI		Major: Power Equipment	
Non-Technical Studies		Non-Technical Studies	
General Education	Sem Cr	General Education	Sem Cr.
Category		Course	
ENGLISH COMPOSITION/ ORAL COMMUNICATION ENGLISH 1110.01	3	ENGLISH 1110.01	3
MATHEMATICS/STATISTICS AND LOGIC	3	GENMATH 1145T	3
SOCIAL/BEHAVIORAL SCIENCES OR ARTS AND HUMANITIES	3	Choose 1 of the following: PSYCH 1100 or RURLSOC 1500 or HISTORY 1152 or MUSIC 2250 or RELSTDS 2370 AEDECON 2001	3
NATURAL SCIENCES	3	TECPHYS 1150T ASM 2150	4
From any of the General Education categories (listed above)	3	AGRCOMM 3130	3
Total General	min. 15	Total General	16
Applied General Education		Applied General Education	
Courses determined by program from the following: General Education categories Applied Sciences Business		BUSTEC 1151T (Gen Econ no longer offered, SBS now requires ECON/replaced with BUSTEC 2241T Small Business Management) BUSTEC 1202T ENGTECH 2092T ENGTECH 2322T ENGTECH 2609T ENGTECH 2331T (no longer offered) GENCOMM 2115T ENGTECH 2608T BUSTEC 2241T	1 2 3 3 3 3 3 3
COLLEGE/CAREER ORIENTATION	1	GENSTDS 1201.01T ENGTECH 1201.01T	0.5 0.5
Total Non-Technical Studies	min. ½ degree total credits	Total Non-Technical Studies	32 30
Technical Studies		Technical Studies	
Industry/Practical Experience 3 (min)- 9 (max) [min 2 cr internship]		ENGTECH 2191.03T GENSTDS 3191T	3 0
Other courses determined by program		ENGTECH 2214T ENGTECH 2612T ENGTECH 2224T ENGTECH 2610T ENGTECH 2240T	43 3 3

		ENGTECH 2312T-ENGTECH 2602T ENGTECH 2603T ENGTECH 2314T ENGTECH 2611T ENGTECH 2224T ENGTECH 2610T ENGTECH 2324T ENGTECH 2604T ENGTECH 2332T ENGTECH 2334T (ENGTECH 2606T) ENGTECH 2338T *ENGTECH 2606T ENGTECH 2336T ENGTECH 2605T ENGTECH 2348T ENGTECH 2607T *ENGTECH 2613T	31.5 1.5 33 3 23 3 1 2 3 3 2-1.5 2-1.5
Technical Studies Total	max 35	Technical Studies Total	28
DEGREE TOTAL	60-65	DEGREE TOTAL	<mark>63</mark>
			<mark>61</mark>

^{*} Requires a C or higher for graduation from program

THE OHIO STATE UNIVERSITY COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Power and Hydraulic Engineering Technologies Associate of Applied Science

PROPOSED WITH HIGHLIGHTED CHANGES

Course	<u>Title</u>	Credits
1st Year – Autumn Semeste	r	
ENGLISH 1110.01	First-Year English Composition	3
ENGTECH 1201.01T	Exploring Engineering Technologies	.5
GENSTDS 1201.01T	College Orientation	.5
GENMATH 1145T	Technical Mathematics	3
ENGTECH 2314T	Introduction to Power Equipment	3
ENGTECH 2312T	Engineering Technology Fundamentals	3
ENGTECH 2214T	Fundamentals of Fluid Power and Components	<mark>4</mark>
ENGTECH 2602T	Workplace Safety	1.5
ENGTECH 2603T	Precision Tools	1.5
ENGTECH 2611T	Small Engine Basics	3
ENGTECH 2612T	Fundamentals of Flud Power and Components	3
BUSTEC 1202T	Software Applications	1
	Total	<mark>17</mark> 14
1st Year – Spring Semester		
BUSTEC 1151T	General Economics	3
BUSTEC 1202T	Software Applications	1
ENGTECH 2322T	Basic Electricity and Electronics	3
*ENGTECH 2324T	Engine Diagnosis and Repair	3
TECPHYS 1150T	Technical Physics	5
ENGLISH 1110.01	First-Year English Composition	3
ENGTECH 2604T	Introduction to Power Units	3
ENGTECH 2609T	Basic Electricity and Electronics	3
ENGTECH 2610T	Components and Fluid Circuits	3
ASM 2150	Applied Agricultural Mechanics and Electronics	<mark>4</mark>
	Total	<mark>15</mark> 16
Summer Term		
*ENGTECH 2191.03T	Power Equipment Internship	<mark>3</mark>
GENSTDS 3191T	Conducting your Internship in CFAES	0
	Total	<mark>3</mark>
2nd Year – Autumn Semeste		
ENGTECH 2092T	Problem Solving: Career and Society Applications	2 3
ENGTECH 2240T	Welding Technology	
ENGTECH 2332T	Mobile Heating and Air Conditioning	l l
*ENGTECH 2334T	Vehicle Electrical and Electronic Systems	<u>2</u>
ENGTECH 2336T	Methods of Power Transmission	2
ENGTECH 2338T	Diesel Engine Systems	3
ENGTECH 2191.03T	Power Equipment Internship	3
AEDECON 2001	Principles of Food and Resource Economics	3
AGRCOMM 3130	Oral Expression in Agriculture	3
	Transmissions and Components	1.5
ENGTECH 2605T		
ENGTECH 2607T	Power Application and Performance	1.5
	Power Application and Performance Electrohydraulics and System Design Total	1.5 3 13-15

- Power Equipment



Power and Hydraulic Engineering Technologies Associate of Applied Science

POWEREQ-AA Catalog Year 2025-2026

PROPOSED WITH HIGHLIGHTED CHANGES

AGRCOMM 3130	Oral Expression in Agriculture	3
ENGTECH 2224T	Fluids, Filtration, and Fluid Conveyance	2
ENGTECH 2331T	Distributor Management	2
*ENGTECH 2348T	Performance of Mobile Power Units	2
GENCOMM 2115T	Technical and Business Writing	3
HUMANITIES or SOCIAL SCIENCE	Choose 1 of the following courses: PSYCH 1100 or RURLSOC 1500 or HISTORY 1152 or MUSIC 2250 or RELSTDS 2370	3
ENGTECH 2240T	Welding Technology	3
*ENGTECH 2606T	Power Units and Components	3
ENGTECH 2608T	Applied Computer Aided Design	<mark>3</mark>
ENGTECH 2332T	Mobile Heating and Air Conditioning	1
BUSTEC 2241T	Small Business Management	<mark>3</mark>
	Total	<mark>15</mark> 16
	Total Credits	<mark>63</mark> 61

ASSOCIATE OF APPLIED SCIENCE DEGREE Power and Hydraulic Engineering Technologies



Ohio State ATI		Major: Construction Management	
Non-Technical Studies		Non-Technical Studies	
General Education	Sem Cr	General Education	Sem Cr.
Category		Course	
ENGLISH COMPOSITION/		ENGLISH 1110.01	3
ORAL COMMUNICATION			
	3		
MATHEMATICS/STATISTICS AND	3	GENMATH 1145T	3
LOGIC			
SOCIAL/BEHAVIORAL SCIENCES	3	AEDECON 2001	3
OR ARTS AND HUMANITIES			
NATURAL SCIENCES	3	ASM 2150	4
TWI OWIL SCIENCES		7151VI 2150	
From any of the General Education	3	AGRCOMM 3130	3
categories (listed above)	3	AGREOWN 3130	
categories (iisted above)			
Total General	min. 15	Total General	16
Total General	11111.10	Total General	10
Applied General Education		Applied General Education	
Courses determined by program from the		ENGTECH 2608T	3
following:		ENGTECH 2609T	3
Tone wing.		BUSTEC 1202T	1
General Education categories		GENCOMM 2115T	3
Applied Sciences		BUSTEC 2241T	3
Business		Besile 22 111	
COLLEGE/CAREER	1	GENSTDS 1201.01T	.5
ORIENTATION		ENGTECH 1201.01T	.5
Total Non-Technical Studies	min.	Total Non-Technical Studies	30
	½ degree		
	total credits		
Technical Studies		Technical Studies	
Industry/Practical Experience		ENGTECH 2191.03T	3
3 (min)- 9 (max) [min 2 cr internship]		GENSTDS 3191T	0
Other courses determined by program		ENGTECH 2602T	1.5
omer courses determined by program		ENGTECH 2603T	1.5
		ENGTECH 2611T	3
		ENGTECH 2612T	3
		ENGTECH 2604T	3
		ENGTECH 2610T	3
		ENGTECH 2605T	1.5
		ENGTECH 2607T	1.5
		*ENGTECH 2613T	3
		ENGTECH 2240T	3
		*ENGTECH 2606T	3
		ENGTECH 2332T	1
Technical Studies Total	max 35	Technical Studies Total	28
DEGREE TOTAL	60-65	DEGREE TOTAL	61

^{*}A grade of C or better required to meet graduation requirements.



Power and Hydraulic Engineering Technologies Associate of Applied Science

POWEREQ-AA Catalog Year 2025-2026

PROPOSED

Course	Title	Credits
1st Year – Autumn Seme	stor	
ENGTECH 2602T	Workplace Safety	1.5
ENGTECH 2603T	Precision Tools	1.5
ENGTECH 2611T	Small Engine Basics	3
ENGTECH 1201.01T	Exploring Engineering Technologies	.5
ENGTECH 2612T	Fundamentals of Flud Power and Components	3
GENSTDS 1201.01T	College Orientation	.5
GENMATH 1145T	Technical Mathematics	3
BUSTEC 1202T	Software Applications	1
DUSTEC 12021	Total	14
	Total	17
1st Year – Spring Semest	er	
ENGLISH 1110.01	First-Year English Composition	3
ENGTECH 2604T	Introduction to Power Units	3
ENGTECH 2609T	Basic Electricity and Electronics	3
ENGTECH 2610T	Components and Fluid Circuits	3
ASM 2150	Applied Agricultural Mechanics and Electronics	4
1101/11 2100	Total	16
	20002	10
Summer Term		
GENSTDS 3191T	Conducting your Internship in CFAES	0
		$\frac{0}{0}$
2 nd Year – Autumn Seme	ester	
ENGTECH 2191.03T	Power Equipment Internship	3
AEDECON 2001	Principles of Food and Resource Economics	3
AGRCOMM 3130	Oral Expression in Agriculture	3
ENGTECH 2605T	Transmissions and Components	1.5
ENGTECH 2607T	Power Application and Performance	1.5
*ENGTECH 2613T	Electrohydraulics and System Design	3
	Total	15
2 nd Year – Spring Semes	<u>ter</u>	
ENGTECH 2240T	Welding Technology	3
*ENGTECH 2606T	Power Units and Components	3
ENGTECH 2608T	Applied Computer Aided Design	3
ENGTECH 2332T	Mobile Heating and Air Conditioning	1
BUSTEC 2241T	Small Business Management	3
GENCOMM 2115T	Technical and Business Writing	3
	Total	16
	Total Credits	61