



**PROGRAM/DEGREE REVISION FORM**

**NEW \_\_\_\_\_ DROPPED \_\_\_\_\_ MAJOR REVISION \_\_\_\_\_ FOR INFORMATION ONLY**

College College of Technical Sciences

Program Area Auto Tech BS

Date 2-11-04

Submitter \_\_\_\_\_  
signature on original

Chair/Dean \_\_\_\_\_  
signatures on original

Date 3-4-04

**Please provide a brief explanation & rationale for the proposed revision(s)**

Expanding ATDI 383 3 to 4 credits. - Reducing credits on AUTO 450 4 to 3

Please provide in the space below a "before & after" picture of the program with the changes in the program noted. Attach appropriate Course Revision Forms. The changes are indicated changes by shading the appropriate cells.

**AUTOMOTIVE TECHNOLOGY BACHELOR OF SCIENCE**

Program sheet effective fall 2003

**FRESHMAN YEAR**

**Courses to be taken Either Semester**

CIS	110 Introduction to Computers	3
SPCH	141 Fund. of Speech	3
	OR	
SPCH	142 Interpersonal Communication	3
ENGL	111 Written Communication I	3
ATDI	134 Auto/Dies Electrical/Electrnc Sys. I	4

**Courses to be taken Fall Semester**

AUTO	115 Intro. To Automotive Service	1
AUTO	119 Automotive Braking Systems	4
AUTO	151 Diagnosis & Tune-Up	3
AUTO	152 Diagnosis & Tune-Up lab	3

**Courses to be taken Spring Semester**

AUTO	117 Auto.Manual Power Trains	4
AUTO	128 Engines	4
	Selective or Minor	3

**SOPHOMORE YEAR**

**Courses to be taken Either Semester**

	Gen Ed Dist (Area C)	3
MATH	110 Math for Liberal Arts	4
	OR	
MATH	112 College Algebra	3

**Courses to be taken Fall Semester**

ATDI	257 Automatics	4
ATDI	264 Auto/Diesel Elect/Electronic Sys. I	4
ATDI	265 Heating & Air Conditioning	4
	Selective or Minor	3

**Courses to be taken Spring Semester**

AUTO	220 Auto. Steering & Suspension	4
AUTO	251 Cmptr. Engine Control System	3
AUTO	252 Cmptr. Engine Control Sys. Lab	3

**JUNIOR YEAR**

**Courses to be taken Either Semester**

ENGL	112 Written Communication I	3
	Gen Ed Dist (Area A)	3
	Gen Ed Dist (Area B)	3
	Gen Ed Dist (Area C)	3

Program sheet effective fall 2004

**FRESHMAN YEAR**

**Courses to be taken Either Semester**

CIS	110 Introduction to Computers	3
ATDI	134 Auto/Dies Electrical/Electrnc Sys. I	4

**Courses to be taken Fall Semester**

ENGL	111 Written Communication I	3
AUTO	115 Intro. To Automotive Service	1
AUTO	119 Automotive Braking Systems	4
AUTO	151 Diagnosis & Tune-Up	3
AUTO	152 Diagnosis & Tune-Up lab	3

**Courses to be taken Spring Semester**

AUTO	117 Auto.Manual Power Trains	4
AUTO	128 Engines	4
SPCH	141 Fund. of Speech	
	OR	
SPCH	142 Interpersonal Communication	3

**SOPHOMORE YEAR**

**Courses to be taken Either Semester**

	Gen Ed Dist (Area C)	3
MATH	110 Math for Liberal Arts	4
	OR	
MATH	112 College Algebra	3/4

**Courses to be taken Fall Semester**

ATDI	257 Automatics	4
ATDI	264 Auto/Diesel Elect/Electronic Sys. I	4
ATDI	265 Heating & Air Conditioning	4

**Courses to be taken Spring Semester**

AUTO	220 Auto. Steering & Suspension	4
AUTO	251 Cmptr. Engine Control System	3
AUTO	252 Cmptr. Engine Control Sys. Lab	3

**JUNIOR YEAR**

**Courses to be taken Either Semester**

ENGL	112 Written Communication I	3
	Gen Ed Dist (Area A)	3
	Gen Ed Dist (Area B)	3
	Gen Ed Dist (Area C)	3
ATDI	384 Auto/Diesel Electronics Apps.	4

**Courses to be taken Fall Semester**

AUTO	355 Automotive Service Operations	3
ATDI	383 Alternative Auto. Power Systems	3
ATDI	400 Shop Procedures	2
	OR	
	Minor	2
AUTO	457 Advanced Power Trains	4

**Courses to be taken Spring Semester**

ATDI	384 Auto/Diesel Electronics Apps.	4
	Selective or Minor	3

**SENIOR YEAR**

**Courses to be taken Either Semester**

AUTO	488 Automotive Practicum	3
	OR	
	Minor	3
	Gen Ed Dist (Area A)	3
	Gen Ed Dist (Area B)	3
	OR	
	Minor	3

**Courses to be taken Fall Semester**

AUTO	408 Current Trends/Mobility Tech.	2
------	-----------------------------------	---

**Courses to be taken Spring Semester**

AUTO	450 Dyn. Testing/Cmptr Data Analysis	4
------	--------------------------------------	---

120

Selective List: 14 credits required

AUTO	479 Cooperative Education	3
BODY	140 Panel Adjustment & Glass (F)	2
BODY	143 Refinishing (F)	3
BODY	144 Refinishing Lab (F)	3
METL	140 Intro/Welding/Cutting F?S)	3
ACCT	261 Prin. Of Accounting I	3
BUS	250 Business Statistics	3
BUS	300 Mgmt in Organization	3
TSS	222 Customer Service	3
CIS	111 Integ. Bus Apps F?S	3
ENGL	366 Technical Writing/Editing	3

**Courses to be taken Fall Semester**

AUTO	355 Automotive Service Operations	3
ATDI	400 Shop Procedures	2
	OR	
	Selective or Minor	2

**Courses to be taken Spring Semester**

ATDI	383 Alternative Auto. Power Systems	4
	Selective or Minor	3
	Selective or Minor	3

**SENIOR YEAR**

**Courses to be taken Either Semester**

AUTO	488 Automotive Practicum	3
	Selective or Minor	3
	Gen Ed Dist (Area A)	3
	Gen Ed Dist (Area B)	3
	Selective or Minor	3

**Courses to be taken Fall Semester**

AUTO	408 Current Trends/Mobility Tech.	2
AUTO	457 Advanced Power Trains	4
	Selective or Minor	3

**Courses to be taken Spring Semester**

AUTO	450 Dyn. Testing/Cmptr Data Analysis	3
	Elective or Minor	2

Selective List: 14 credits required (at least 5 crs. must be upper division)

AUTO	479 Cooperative Education	3
BODY	140 Panel Adjustment & Glass	2
BODY	143 Refinishing	3
BODY	144 Refinishing Lab	3
METL	140 Intro/Welding/Cutting	3
ACCT	261 Prin. Of Accounting I	3
BUS	250 Business Statistics	3
BUS	300 Mgmt in Organization	3
TSS	222 Customer Service	3
CIS	111 Integ. Bus Apps	3
ENGL	366 Technical Writing/Editing	3

**PROGRAM/DEGREE REVISION FORM**

NEW  DROPPED  MAJOR REVISION  FOR INFORMATION ONLY

College College of Technical Sciences

Program Area AutoTechnology Minor

Date 2-11-04

Submitter \_\_\_\_\_

signature

Chair/Dean \_\_\_\_\_

signature

Date 3-2-04

**Please provide a brief explanation & rationale for the proposed revision(s)**

Delete AUTO 408 change credits on ATDI 383 from 3 to 4

Total credit required go from 30 to 29

**Please provide in the space below a "before & after" picture of the program with the changes in the program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the**

**AUTOMOTIVE TECHNOLOGY MINOR**

Program sheet effective fall 2003

**Required Courses**

AUTO	115 Intro. to Automotive Service	1
AUTO	117 Automotive Manual Power Trains	4
AUTO	151 Diagnosis & Tune Up	3
AUTO	152 Diagnosis & Tune Up Lab	3
AUTO	408 Current Trends in Mobility Tech	2
ATDI	134 Auto/Diesel Elect/Electrn. Sys. I	4
ATDI	264 Auto/Diesel Elect/Electrn Sys. II	4
ATDI	383 Alternative Automotive Power Sys.	3
ATDI	384 Auto/Diesel Electronics Applies.	4
ATDI	400 Shop Procedures	2

30

Program sheet effective fall 2004

**Required Courses**

AUTO	115 Intro. to Automotive Service	1
AUTO	117 Automotive Manual Power Trains	4
AUTO	151 Diagnosis & Tune Up	3
AUTO	152 Diagnosis & Tune Up Lab	3
ATDI	134 Auto/Diesel Elect/Electrn. Sys. I	4
ATDI	264 Auto/Diesel Elect/Electrn Sys. II	4
ATDI	383 Alternative Automotive Power Sys.	4
ATDI	384 Auto/Diesel Electronics Applies.	4
ATDI	400 Shop Procedures	2

29

## COURSE REVISION FORM

NEW  DROPPED  MAJOR REVISION  FOR INFORMATION ONLY   
College COTS Program Area AUTOMOTIVE Date 2-11-04  
Submitter \_\_\_\_\_ Chair/Dean \_\_\_\_\_ Date \_\_\_\_\_  
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

We are expanding ATDI 383 from 3 credits to 4 credits. This is necessary to include more lab objectives in this expanding technology area. Lecture credits will remain the same, but the lab will be expanded by one credit.

Please provide the following information:

**College:** College of Technical Sciences

**Program Area:** Automotive

**Date:** 2-11-04

**Course Prefix & No.:** ATDI 383

**Course Title:** Alternative Automotive Power Systems

**Credits:** 4

**Required by:** Automotive Technology Bachelor of Science Degree  
Automotive Technology Minor

**Selective in:**

**Elective in:**

**General Education:**

**Lecture:**

**Lecture/Lab:** X

**Contact hours lecture:** 2

**Contact hours lab:** 4

**Current Catalog Description (include all prerequisites):**

This course examines a variety of alternative power sources used in the automotive transportation industry. Topics covered in the class are compression ignition engine systems, propane & CNG systems, Hybrid electric systems, and electric propulsion systems.  
Prerequisites: AUTO 128 and ATDI 264.

**Proposed or New Catalog Description (include all prerequisites):**

This course examines a variety of alternative power sources used in the automotive transportation industry. Topics covered in the class are compression ignition engine systems, propane & CNG systems, Hybrid electric systems, and electric propulsion systems.  
Prerequisites: AUTO 128 and ATDI 264.

**Course Outcome Objectives:**

Students will become proficient in the operation, diagnosis and repair of compression ignition engine systems, propane & CNG systems, Hybrid electric systems, and electric propulsion systems.

**Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.**

## COURSE REVISION FORM

NEW  DROPPED  MAJOR REVISION  FOR INFORMATION ONLY   
College COTS Program Area AUTOMOTIVE Date 2-11-04  
Submitter \_\_\_\_\_ Chair/Dean \_\_\_\_\_ Date \_\_\_\_\_  
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

We are going to reduce the credits on AUTO 450 from 4 to 3. We are taking away one credit from this class in order to expand ATDI 383 by one credit.

Please provide the following information:

**College:** College of Technical Sciences

**Program Area:** Automotive

**Date:** 2-11-04

**Course Prefix & No.:** Auto 450

**Course Title:** Dynamometer Testing and Computer Systems Analysis

**Credits:** 3

**Required by:** Automotive Technology Bachelor of Science Degree

**Selective in:**

**Elective in:**

**General Education:**

**Lecture:**

**Lecture/Lab:** X

**Contact hours lecture:** 1

**Contact hours lab:** 4

**Current Catalog Description (include all prerequisites):**

Dynamic testing, analysis and evaluation of internal combustion engines from both, the mechanical and computer system application. Prerequisites: AUTO 251, AUTO 252, ATDI 384, ENGL 112 (can be taken concurrently), SPCH 141, and Senior Standing. **Course Fee \$20.00**

**Proposed or New Catalog Description (include all prerequisites):**

Dynamic testing, analysis and evaluation of internal combustion engines from both, the mechanical and computer system application. Prerequisites: AUTO 251, AUTO 252, ATDI 384, ENGL 112 (can be taken concurrently), SPCH 141, and Senior Standing. **Course Fee \$20.00**

**Course Outcome Objectives:**

A. Introduction

1. code log and curve sheets
2. engine equipment
3. preliminary engine checking procedure
4. precision engine adjustments and settings
5. engine stability
6. torque, speed power
  - i. instrumentation
  - ii. computations
7. spark timing and detonations
8. fuel consumption
9. air consumption
10. temperatures

11. pressures

12. humidity

- B. Standard tests
- C. Engine durability tests
- D. Air-Fuel metering tests
- E. Engine cold tests
- F. Power correction tables and reference materials
- G. Checking lists and tests codes
- H. Equipment calibration tests
- I. Interpretations

**Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.**

ACAD course revision form 10-10-2001 rev. 12-12-01