ACADEMIC SENATE PROPOSAL TRACKING SHEET

(Document To Be Originated By Academic Senate Secretary On Canary Color Paper)

All proposals MUST have their originating college faculty body (Ex. Nursing, Technical Sciences, Arts & Sciences, Education) **approval and must be signed by the submitter and the college chair/dean before being submitted to the academic senate secretary.**

1. Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms) to the Academic Senate Secretary.
2. The Academic Senate Secretary logs and numbers items and forwards them to the appropriate Academic Senate subcommittee(s): Teacher Education (if applicable), General Education (if applicable), or Curriculum.
3. The Academic Senate subcommittee(s) consider(s) the proposal. If approved, the proposal is forwarded to the next committee. If a committee disapproves the proposal, the originator may request that the item be forwarded to the next body for consideration. The committee will provide written rationale to the originator when a proposal is disapproved and the proposal is returned to the originator.
4. The Academic Senate considers the proposal and approves or disapproves. If approved, the proposal is forwarded to the Full Faculty for consideration. If the Academic Senate disapproves the proposal, the originator may request that the item be forwarded to the Full Faculty for consideration. The Academic Senate will provide written rationale to the originator when proposals are disapproved and the proposal is returned to the originator.
5. The Full Faculty considers academic senate approved proposals. If faculty approve, the proposal will then be forwarded to the Provost. The Provost approves or disapproves the proposal. If approved, the proposal is then forwarded to the Chancellor.
7. The Chancellor approves or disapproves the proposal.

Subcommittee and Academic Senate college representatives will notify their respective colleges' of the progress of submitted proposals or the proposal may be tracked via the web page --
http://www.msun.edu/admin/provost/asproposals.htm
Documentation and forms for the curriculum process is also available on the web page:
http://www.msun.edu/admin/provost/asforms.htm

*****(If a proposal is disapproved at any level, it is returned through the Academic Senate secretary to the Chair/Dean of the submitting college who then notifies the originator.)**

Proposal # 07-23 **Title:** AUTO AAS Revision (FAST TRACK)
(proposal explanation, submitter and college chair/dean signatures on attached program/degree or course revision form)

	Date				
Received by ACAD Senate	4/21/08				
Forwarded to Teacher Ed Council	NA	Approved	____	Disapproved	____
		Signature			Date
Forwarded to Gen Ed Committee	4/21/08	Approved	X	Disapproved	____
		Signature			Date 4/24/08
Returned to ACAD Senate	4/24/08				
Forwarded to Curriculum Committee	4/24/08	Approved	[signature]	Disapproved	____
		Signature			Date 5/1/08
Returned to ACAD Senate for Vote	5-1-08	Approved	X	Disapproved	____
		Signature	[signature]		Date 5-1-08
~~Sent to Provost's office for Full Faculty vote~~	____				
~~Voted on at Full Faculty meeting~~	____	Approved	____	Disapproved	____
		Signature			Date
Forwarded to Provost for Approval/Disapproval	5/8/08	Approved	X	Disapproved	6-5-08
		Signature	[signature]		Date
Forwarded to Chancellor for Approval/Disapproval	6/6/08	Approved	✓	Disapproved	6/6/08
		Signature	[signature]		Date
Copies sent to originating college and registrar's office	6/6/08				

C/data/proposaltracking sheet ACAD 10 10 01

PROGRAM/DEGREE REVISION FORM

NEW ____ **DROPPED** ____ **MAJOR REVISION** ____ **FOR INFORMATION ONLY** X

College College of Technical Sciences **Program Area** Automotive Technology **Date** 3/4/08

Submitter Wayne Boyum (Signature) **Chair/Dean** (Signature (indicates "college" level approval)) **Date** 4-14-09

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

The automotive department is updating the AAS curriculum to meet current industry standards as well as updating related instruction requirements.

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

Proposal Title: AAS Automotive Technology

Current Program Listed in 07-08 Catalog

Course Prefix	Course #	Course Title	Credits
CAT I		ENGL 111 or SPCH 141 or SPCH 142	3
CAT II		MAAS 106 or MATH 110 or MATH 112	3
CAT IX		Technology	3
ATDI	134	Auto/Diesel Electrical/Electronic Systems I	4
ATDI	220	Automotive Diesel & Hybrid Vehciles	3
ATDI	257	Automatics	4
ATDI	264	Auto/Diesel Electrical/Electronic Systems II	4
ATDI	265	Heating and Air Conditioning	4
AUTO	115	Introduction to Automotive Service	1
AUTO	117	Automotive Manual Power Trains	4
AUTO	119	Automotive Braking Systems	4
AUTO	120	Automotive Steering and Suspension	4
AUTO	128	Engines	5
AUTO	151	Diagnosis and Tune Up	4
AUTO	210	ASE Certification I	1
AUTO	211	ASE Certification II	1
AUTO	251	Computerized Engine Control Systems	4
AUTO	279	Cooperative Education	3
XXX	XXX	Advisor Approved Elective	3
		TOTAL	62

Proposed Program for 08-09 Catalog

Course Prefix	Course #	Course Title	Degree Credits
		ENGL 111	3
		SPCH 141 or 142	3
		MAAS 106 or MATH 110 or MATH 112	3
ATDI	134	Auto/Diesel Electrical/Electronic Systems I	4
ATDI	220	Automotive Diesel & Hybrid Vehciles	3
ATDI	257	Automatics	4
ATDI	264	Auto/Diesel Electrical/Electronic Systems II	4
ATDI	265	Heating and Air Conditioning	4
AUTO	115	Introduction to Automotive Service	1
AUTO	117	Automotive Manual Power Trains	4
AUTO	119	Automotive Braking Systems	4
AUTO	120	Automotive Steering and Suspension	4
AUTO	128	Engines	5
AUTO	151	Diagnosis and Tune Up	4
AUTO	210	ASE Certification I	1
AUTO	211	ASE Certification II	1
AUTO	251	Computerized Engine Control Systems	4
AUTO	279	Cooperative Education	3
XXX	XXX	Advisor Approved Elective	3
		TOTAL	62

Additional instructional resources needed (including library materials, special equipment, and facilities).

Please note: approval does not indicate support for new faculty or additional resources.

NEW ____ DROPPED ____ MAJOR REVISION ____ FOR INFORMATION ONLY X____

College College of Technical Sciences Program Area Automotive Technology Date 3/4/08

Submitter Wane Boyum Chair/Dean Gregory D. Ka Date 4-14-08

Signature Signature (indicates "college" level approval)

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

The automotive department is revising its AAS degree to offer an additional "Fast Track" 12 month associate of applied science degree by integrating related instruction requirements in existing automotive curriculum.

program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells.

Proposal Title: AAS Fast Track Automotive Technology

Current Program Listed in 07-08 Catalog

Course Prefix	Course #	Course Title	Credits
CAT I		ENGL 111 or SPCH 141 or SPCH 142	3
CAT II		MAAS 106 or MATH 110 or MATH 112	3
CAT IX		Technology	3
ATDI	134	Auto/Diesel Electrical/Electronic Systems I	4
ATDI	220	Automotive Diesel & Hybrid Vehciles	3
ATDI	257	Automatics	4
ATDI	264	Auto/Diesel Electrical/Electronic Systems II	4
ATDI	265	Heating and Air Conditioning	4
AUTO	115	Introduction to Automotive Service	1
AUTO	117	Automotive Manual Power Trains	4
AUTO	119	Automotive Braking Systems	4
AUTO	120	Automotive Steering and Suspension	4
AUTO	128	Engines	5
AUTO	151	Diagnosis and Tune Up	4
AUTO	210	ASE Certification I	1
AUTO	211	ASE Certification II	1
AUTO	251	Computerized Engine Control Systems	4
AUTO	279	Cooperative Education	3
XXX	XXX	Advisor Approved Elective	3
		TOTAL	62

Proposed Program for 08-09 Catalog

Course Prefix	Course #	Course Title	Degree Credits
ATDI	134	Auto/Diesel Electrical/Electronic Systems I	4
ATDI	220	Automotive Diesel & Hybrid Vehciles	3
ATDI	257	Automatics	4
ATDI	264	Auto/Diesel Electrical/Electronic Systems II	4
ATDI	265	Heating and Air Conditioning	4
AUTO	115	Introduction to Automotive Service	1
AUTO	117	Automotive Manual Power Trains	4
AUTO	119	Automotive Braking Systems	4
AUTO	120	Automotive Steering and Suspension	4
AUTO	128	Engines	5
AUTO	151	Diagnosis and Tune Up	4
AUTO	210	ASE Certification I	1
AUTO	211	ASE Certification II	1
AUTO	251	Computerized Engine Control Systems	4
AUTO	279	Cooperative Education	9
XXX	XXX	Advisor Approved Elective	3
XXX	XXX	Advisor Approved Elective	3
		TOTAL	62

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 X___

College COTS_____ Program Area Auto_____ Date 4-23-08

Submitter_____ Dean _____ Date 4.24.08
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
We are revising the automotive curriculum to include hybrid and diesel vehicles with-in the associate degree program.

Please provide the following information:

College:	COTS
Program Area:	Automotive
Date:	4-23-2008
Course Prefix & No.:	Auto 115
Course Title:	Introduction to Automotive Service
Credits:	1
Required by:	Automotive certificate, AAS, BS, Minor
Selective in:	none
Elective in:	none
General Education:	no
Lecture:X	
Lecture/Lab:	
Gradable Lab:	
Contact hours lecture: 1	
Contact hours lab:	0

Current Catalog Description (include all prerequisites):
An introductory course designed to assist the novice automotive technician in adjusting to the demands of an automotive service facility. This course will expose the student to the flat rate method of shop pay as well as focus on many customer concerns. The student will experience the most effective method when dealing with customer service while demonstrating correct dealer etiquette.

Proposed or New Catalog Description (include all prerequisites):
An introductory course designed to assist the novice automotive technician in adjusting to the demands of an automotive service facility. This course will expose the students to the flat rate method of shop pay. Students will also develop a portfolio which showcases the student's technical expertise and human relation skills for obtaining cooperative education and full time employment. This course meets the human relation component of related instruction for CAS and AAS degrees. Students will fulfill human relations requirements for the Automotive Certificate of Applied Science and Associate of Applied Science by completing this course.

Course Outcome Objectives:
Upon completing this course the student will have the ability to properly communicate automotive technology to customers and present a professional image of their employer.

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 X___

College COTS _____ Program Area Auto _____ Date 4-23-08

Submitter _____ Dean _____ Date 4.24.08
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
We are revising the automotive curriculum to include hybrid and diesel vehicles with-in the associate degree program.

Please provide the following information:

College:	COTS
Program Area:	Automotive
Date:	4-23-2008
Course Prefix & No.:	ATDI 134
Course Title:	Auto/Diesel Electrical/Electronic Systems I
Credits:	4
Required by:	Agricultural Mechanics Technology AAS Agricultural Mechanics Technology Minor Agricultural Mechanics Technology Certificate Agricultural Operations Technology BS Automotive Technology Minor Diesel Technology BS Diesel Technology AAS Diesel Technology Field Maintenance Option BS Automotive Technology Certificate Automotive Technology (Automotive Body) AAS Automotive Technology AAS Automotive Technology BS
Selective in:	none
Elective in:	none
General Education:	no
Lecture:	
Lecture/Lab: X	
Gradable Lab:	
Contact hours lecture: 2	
Contact hours lab:	4

Current Catalog Description (include all prerequisites):
A beginning course in the study of electrical/electronic fundamentals applied to automotive and commercial vehicle systems. Includes theory, design, diagnosis, and repair of wiring and circuits, batteries, alternators, and starters. The use of test instruments and electrical troubleshooting manuals currently recommended by industry will be emphasized.

Proposed or New Catalog Description (include all prerequisites):
This is a course in the study of electrical/electronic fundamentals applied to automotive and commercial vehicle systems. It includes theory, design, diagnosis, and repair of wiring and circuits, batteries, alternators, and starters. The use of test instruments and electrical troubleshooting manuals currently recommended by industry will be emphasized. Ohms law and circuit analysis, as it applies to industry, will also be examined. Students will fulfill computation requirements for Certificate of Applied Science and Associate of Applied Science by completing this course.

Course Outcome Objectives:
The student will understand Ohm's Law, series parallel and series-parallel circuits, the theory of magnetism, basic vehicle wiring, and the use of electrical test equipment. The student will be able to test and/or repair both automotive and heavy duty alternators, starters, batteries, solenoids, voltage regulators and electrical 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.

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COURSE REVISION FORM

NEW____ DROPPED____ MAJOR REVISION____ FOR INFORMATION ONLY X___

College COTS_____ Program Area Auto_____ Date 4-23-08

Submitter_____ Dean _____ Date 4.24.08
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
We are revising the automotive curriculum to include hybrid and diesel vehicles with-in the associate degree program.

Please provide the following information:

College:	COTS
Program Area:	Automotive
Date:	4-23-2008
Course Prefix & No.:	ATDI 264
Course Title:	Auto/Diesel Electrical/Electronic Systems II
Credits:	4
Required by:	Automotive certificate, AAS, BS, Minor, Diesel AAS, BS, Minor
Selective in:	none
Elective in:	none
General Education:	no
Lecture:	
Lecture/Lab:	X
Gradable Lab:	
Contact hours lecture: 2	
Contact hours lab:	4

Current Catalog Description (include all prerequisites):
This course is a continuation of the study of electrical/electronic systems in use on current automotive and commercial vehicles. With emphasis on industry recommended diagnostic and repair procedures, topics include charging and cranking systems, ignition systems, power accessories, and an introduction to microprocessor-based engine, powertrains, and brake/suspension control systems. Prerequisite: ATDI 134. Course Fee: $20.00

Proposed or New Catalog Description (include all prerequisites):
This course is a continuation of the study of electrical/electronic systems in use on current automotive and heavy equipment. The course will study industry recommended diagnostic and repair procedures, charging and cranking systems, ignition systems, power accessories, and an introduction to microprocessor-based engine, powertrains, and brake/suspension control systems. Students will fulfill communication requirements for Certificate of Applied Science and Associate of Applied Science by completing this course. Prerequisite: ATDI 134. Course Fee: $20.00

Course Outcome Objectives:
Use wiring diagrams during diagnosis of electrical circuit problems.
Check electrical circuits with a test light; determine needed repairs.
Check voltage and voltage drop in electrical /electronic circuits using a digital multimeter (DMM); determine needed repairs.
Check current flow in electrical/electronic circuits and components using an ammeter; determine needed repairs.
Check electrical circuits using jump wires; determine needed repairs.
Find shorts, grounds, opens and resistance problems in electrical/electronic circuits; determine needed repairs.
Measure and diagnose the cause(s) of abnormal key-off battery drain; determine needed repairs.
Inspect and test fusible links, circuit brakers, and fuses; replace as needed.
Inspect and test switches, connectors, relays and wires of electrical/electronic circuits; repair or

replace as needed.
Perform battery state-of-charge test; determine service.
Perform battery capacity (load, high-rate discharge) test; determine needed service.
Maintain or restore electronic memory function.
Inspect, clean, fill, and replace battery.
Perform slow/fast battery charge.
Inspect and clean battery cables, connectors, clamps, and hold-downs; repair or replace as needed.
Start a vehicle using jumper cables and a battery or auxiliary power supply.
Perform starter current draw and circuit voltage drop test; determine needed repairs.
Inspect and test starter relays and solenoids, replace as needed.
Remove and replace/reinstall starter.
Perform starter bench tests; determine needed repairs.
Inspect, test, and repair or replace switches, connectors, and wires of starter control circuits.
Disassemble, clean, inspect, and test starter components; replace as needed.
Diagnose charging system problems that cause an undercharge, a no-charge or an overcharge condition.
Inspect and adjust alternator drive belt; replace as needed.
Inspect and test voltage regulator; replace as needed.
Remove, inspect, and replace/reinstall alternator.
Disassemble, clean, inspect, and test components; replace as needed.
Perform charging circuit voltage drop tests; determine needed repairs.
Diagnose brighter than normal, intermittent, dim or no light operation.
Inspect, replace, and aim headlights and bulbs.
Inspect and diagnose incorrect turn signal or hazard light operation; repair or replace as needed.
Diagnose intermittent, high, low, or no gauge readings.
Test gauge circuit voltage regulators (limiters); replace as needed.
Inspect and test connectors, wires, printed circuit boards of gauge circuits; repair or replace as needed.
Diagnose incorrect operation of warning devices and other driver information systems.
Diagnose intermittent, high, low, or no readings on electronic instrument clusters.
Inspect and test sensors, sending units, connectors, and wires of electronic instrument circuits; repair or replace as needed.
Diagnose incorrect horn operation; repair as needed.
Diagnose wiper operation; diagnose wiper speed control and park problems; repair as needed.
Diagnose incorrect windshield washer operation; repair as needed.
Diagnose incorrect operation of motor-driven accessory circuits; repair as needed.
Diagnose incorrect heated glass operation; repair as needed.
Diagnose incorrect electric door and hatch-trunk lock operation; repair as needed.
Diagnose incorrect operation of cruise control systems; repair as needed.
Diagnose supplement restraint system (SRS) problems; repair as needed. (Note: Follow manufacturer's safety procedures to prevent accidental deployment.)

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.
ATDI264courserevform0708