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.

Copies sent to originating college and

C/data/proposaltracking sheet ACAD 10 10 01

registrar's office

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:

***(If a proposal is disapproved at any level, it is returned through the Academic Senate secretary to the

http://www.msun.edu/admin/provost/asforms.htm

Chair/Dean of the submitting college who then notifies the originator.) Proposal # (proposal explanation, submitter and college chair/dean signatures on attached program/degree or course revision form) SIGNOFUNGS moncate Signer Received by ACAD Senate Forwarded to Teacher Ed Council Approved Disapproved Signature Disapproved Forwarded to Gen Ed Committee Approved Sanature Date Returned to ACAD Senate Forwarded to Curriculum Committee Disapproved Returned to ACAD Senate for Vote Disapproved Sent to Provost's office for Full Faculty vote Voted on at Full Faculty meeting Approved Disapproved Signature Date Disapproved Forwarded to Provost for Approval/Disapproval Approved Signature Date Disapproved Forwarded to Chancellor for Approval/Disapproval Approved Signature Date

| | NEW | DROPPED | MAJOR REVISION | X | FOR INFORMA | TION ONLY |
|---------|-----------|--|----------------------|---------|------------------|--------------|
| College | College o | f Technical Sciences | Program Area D | iesel 1 | Technology BS | Date 4-15-03 |
| | Subm | itter Jag Vocase signatures on original | _Chair/Dean / | u Di | Val Date | 4.15.03 |
| | | | | | | |
| | Plea | ase provide a brief ex | planation & rational | for th | ne proposed revi | sion(s) |

Revision of Diesel bachelor degree to include options

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 appropriate cells.

BROADFIELD DIESEL OPTION see back page for color explanation

| | | | | see back page for color explanation | 1 | |
|------|---|---|--------|--|---|----|
| | FRESHMAN YEAR Courses to be taken Either Semester | | Course | FRESHMAN YEAR s to be taken Either Semester | | |
| METL | 140 Intro. To Welding & Cutting | 3 | IT | 140 Intro. To Welding & Cutting | 3 | |
| ENGL | 111 Written Communication I | 3 | ENGL | 111 Written Communication I | 3 | |
| SPCH | 141 Fundamentals of Speech | 3 | SPCH | 141 Fundamentals of Speech | 3 | |
| | Courses to be taken Fall Semester | | | Courses to be taken Fall Semester | | 9 |
| DIES | 104 Introduction to Diesel Engines | 3 | DIES | 104 Introduction to Diesel Engines | 3 | |
| | AND | | | AND | | |
| DIES | 114 Introduction to Diesel Engines Lab | 3 | DIES | 114 Introduction to Diesel Engines Lab | 3 | |
| | OR | | | OR | | |
| DIES | 115 Intro. to Diesel Fuel Systems | 4 | DIES | 115 Intro. to Diesel Fuel Systems | 4 | |
| ATDI | 134 Auto/Diesel Electrical/Elctrnc Sys. I | 4 | ATDI | 134 Auto/Diesel Electrical/Elctrnc Sys. I | 4 | |
| DIES | 204 Intro. To Hydraulics & Pneumatics | 2 | DIES | 204 Intro. To Hydraulics & Pneumatics | 2 | |
| DIES | 214 Intro. To Hydraulics/ Pneum. lab | 2 | DIES | 214 Intro. To Hydraulics/ Pneum. lab | 2 | 14 |
| | r , | | | Courses to be taken Spring Semester | | |
| DIES | 104 Introduction to Diesel Engines | 3 | DIES | 104 Introduction to Diesel Engines | 3 | |
| | AND | | 1. 68 | AND | | |
| DIES | 114 Introduction to Diesel Engines Lab | 3 | DIES | 114 Introduction to Diesel Engines Lab | 3 | |
| | OR | | | OR / | | |
| DIES | 115 Intro. to Diesel Fuel Systems | 4 | DIES | 115 Intro. to Diesel Fuel Systems | 4 | |
| ATDI | 265 Heating & Air Conditioning | 4 | ATDI | 265 Heating & Air Conditioning | 4 | |
| | | | , IT | 111 Industrial Safety & Waste Mgmt. | 2 | |
| | SOPHOMORE YEAR | | | SOPHOMORE YEAR | | 10 |
| | Courses to be taken Either Semester | | Course | s to be taken Either Semester | | |
| MATH | 110 Math for Liberal Arts | 4 | MATH | 110 Math for Liberal Arts | 4 | |
| | OR | | | OR | | |
| MATH | 112 College Algebra | 3 | MATH | 112 College Algebra | 3 | |
| CIS | 110 intro to Computers | 3 | CIS | 110 intro to Computers | 3 | |
| | Gen Ed Dist (Area A, B, or C) | 3 | | Gen Ed Dist (Area B | 3 | 9 |
| | r | | | Courses to be taken Fall Semester | | |
| ATDI | 264 Auto/Diesel Electrical/Elctrnc Sys. II | 4 | ATDI | 264 Auto/Diesel Electrical/Elctrnc Sys. II | 4 | |
| DIES | 216 Heavy Duty Power Trains | 4 | DIES | 216 Heavy Duty Power Trains | 4 | |
| DIES | 262 Diesel Engine Diagnosis & Repair | 2 | DIES | 262 Diesel Engine Diagnosis & Repair | 2 | |
| DIES | 272 Diesel Engine Diagnosis & Repair lab | 4 | DIES | 272 Diesel Engine Diagnosis & Repair lab | 4 | 14 |
| | Courses to be taken Spring Semester | | | Courses to be taken Spring Semester | | |

| 1 | | | | | | |
|------|---|-----|--------|---|---|--------|
| ATDI | 257 Automatics | 4 | ATDI | 257 Automatics | 4 | |
| DIES | 219 Heavy Duty Chassis | 4 . | DIES | 219 Heavy Duty Chassis | 4 | |
| DIES | 273 Diesel Shop Practices | 4 | | | | 8 |
| | JUNIOR YEAR | | | JUNIOR YEAR | | |
| | Courses to be taken Either Semester | | | Courses to be taken Either Semester | | |
| METL | 155 Machining Processes | 3 | IT | 155 Machining Processes | 3 | |
| | Gen Ed Dist (Area B) | 3 | ENGL | 366 Tech. Writing/Editing (Area A) | 3 | |
| | Gen Ed Dist (Area B) | 3 | | Gen Ed Dist (Area C) | 3 | |
| ENGL | 366 Tech. Writing/Editing (Area A) | 3 | | | | |
| ENGL | 112 Written Communication II | 3 | ENGL | 112 Written Communication II | 3 | 12 |
| | Courses to be taken Fall Semester | | Course | es to be taken Fall Semester | | |
| ATDI | 384 Auto/Diesel Electronics Apps | 4 | ATDI | 384 Auto/Diesel Electronics Apps | 4 | |
| METL | 260 Repair & Maintenance Welding | 3 | METL | 360 Repair & Maintenance Welding | 3 | 7 |
| | Courses to be taken Spring Semester | | Course | es to be taken Spring Semester | | |
| DIES | 314 Hydraulics & Pneumatics II | 4 | DIES | 314 Hydraulics & Pneumatics II | 4 | |
| | | | DIES | 373 Diesel Shop Practices | 4 | |
| | | | TSCI | 304 Fuels/Lubricants (Area C) | 3 | 11 |
| | SENIOR YEAR | | | SENIOR YEAR | | |
| | Courses to be taken Either Semester | | | Courses to be taken Either Semester | | |
| TSCI | 304 Fuels/Lubricants (Area C) | 3 | | Gen Ed Dist (Area B) | 3 | |
| | Gen Ed Dist (Area A) | 3 | | Gen Ed Dist (Area A) | 3 | |
| | | | | Electives | 3 | |
| | | | | Electives | 2 | |
| | | | | OR | | |
| | | | DIES | 479 Cooperative Education | 6 | 11 |
| | Courses to be taken Fall Semester | | Course | es to be taken Fall Semester | | |
| ATDI | 400 Shop Procedures II | 2 | ATDI | 400 Shop Procedures II | 2 | |
| DIES | 420 Diesel Shop Mgmt. | 2 | DIES | 420 Diesel Shop Mgmt. | 2 | |
| DIES | 440 Advanced Fuel Systems | 4 | DIES | 440 Advanced Fuel Systems | 4 | 8 |
| | Courses to be taken Spring Semester | | Course | s to be taken Spring Semester | | |
| DIES | 434 Current Model Year Tech (Capstone) | 3 . | DIES | 434 Current Model Year Tech (Capstone) | 3 | |
| DIES | 450 Diagnosis of Power Shifts & HD Auto | 4 | DIES | 450 Diagnosis of Power Shifts & HD Auto | 4 | 7 |
| | Electives | 6 | | | | |
| | OR | | | | | |
| DIES | 479 Cooperative Education | 6 | | | | 120 |
| | | | | | | |
| | | | | color example | | |
| | | | DIES | 434 Current Model Year Tech (Capstone) | 3 | CORE |
| | | | METL | 260 Repair & Maintenance Welding | 3 | OPTION |
| | | | | Con Ed Diet (Area A) | | |

prog rev dies broadfield option 4-15-03

Gen Ed Dist (Area A)
Gen Ed Dist (Area B)

Gen Ed Dist (Area C)
Gen Ed core courses

| NEW | _ DROPPED | MAJOR REVISION _ | Χ | FOR INFORMAT | ION ONLY |
|--------------------|------------------------|-------------------|-------|--------------------|--------------|
| College College of | | | | | Date 4-15-03 |
| Submi | tter <i>May (ku)</i> | 16 Chair/Dean Muy | u C | Date _ | 1.15.03 |
| | signatures on original | $\overline{}$ | signa | atures on priginal | |

Please provide a brief explanation & rational for the proposed revision(s)
Revision of Diesel bachelor degree to include options

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 appropriate cells.

POWER GENERATION OPTION

| | | | | POWER GENERATION OPTION see back page for color explanation FRESHMAN YEAR | | |
|------|---|--------------|-----------|---|---|----|
| | FRESHMAN YEAR Courses to be taken Either Semester | Courses to b | e taken E | ither Semester | | |
| METL | 140 Intro. To Welding & Cutting | 3 | IT | 140 Intro. To Welding & Cutting | 3 | |
| ENGL | 111 Written Communication I | 3 | ENGL | 111 Written Communication I | 3 | |
| SPCH | 141 Fundamentals of Speech | 3 | SPCH | 141 Fundamentals of Speech | 3 | 9 |
| | Courses to be taken Fall Semester | | | Courses to be taken Fall Semester | | |
| DIES | 104 Introduction to Diesel Engines | 3 | DIES | 104 Introduction to Diesel Engines | 3 | |
| | AND | | | AND | | |
| DIES | 114 Introduction to Diesel Engines Lab | 3 | DIES | 114 Introduction to Diesel Engines Lab | 3 | |
| | OR | | | OR | | |
| DIES | 115 Intro. to Diesel Fuel Systems | 4 | DIES | 115 Intro. to Diesel Fuel Systems | 4 | |
| ATDI | 134 Auto/Diesel Electrical/Elctrnc Sys. | 4 | ATDI | 134 Auto/Diesel Electrical/Elctrnc Sys. | 4 | |
| DIES | 204 Intro. To Hydraulics & Pneumatics | 2 | DIES | 204 Intro. To Hydraulics & Pneumatics | 2 | |
| DIES | 214 Intro. To Hydraulics/ Pneum. lab | 2 | DIES | 214 Intro. To Hydraulics/ Pneum. lab | 2 | 14 |
| C | Courses to be taken Spring Semester | | . (| Courses to be taken Spring Semester | | |
| DIES | 104 Introduction to Diesel Engines | 3 | DIES | 104 Introduction to Diesel Engines | 3 | |
| | AND | | | AND | | |
| DIES | 114 Introduction to Diesel Engines Lab | 3 | DIES | 114 Introduction to Diesel Engines Lab | 3 | |
| | OR | | | OR | | |
| DIES | 115 Intro. to Diesel Fuel Systems | 4 | DIES | 115 Intro. to Diesel Fuel Systems | 4 | |
| ATDI | 265 Heating & Air Conditioning | 4 | ATDI | 265 Heating & Air Conditioning | 4 | 8 |
| | SOPHOMORE YEAR | | | SOPHOMORE YEAR | | |
| | Courses to be taken Either Semester | | Courses | s to be taken Either Semester | | |
| MATH | 110 Math for Liberal Arts | 4 . | MATH | 110 Math for Liberal Arts | 4 | |
| | OR | | | OR | | |
| MATH | 112 College Algebra | 3 | MATH | 112 College Algebra | 3 | |
| CIS | 110 intro to Computers | 3 | CIS | 110 intro to Computers | 3 | |
| | Gen Ed Dist (Area A, B, or C) | 3 | | Gen Ed Dist (Area C) | 3 | 9 |
| | Courses to be taken Fall Semester | | Courses | s to be taken Fall Semester | | |
| ATDI | 264 Auto/Diesel Electrical/Elctrnc Sys. | 4 | | | | |
| DIES | 216 Heavy Duty Power Trains | 4 | DIES | 216 Heavy Duty Power Trains | 4 | |
| DIES | 262 Diesel Engine Diagnosis & Repair | 2 | DIES | 262 Diesel Engine Diagnosis & Repair | 2 | |
| DIES | 272 Diesel Engine Diagnosis & Repair I | 4 | DIES | 272 Diesel Engine Diag & Repair lab | 4 | 10 |
| C | Courses to be taken Spring Semester | | (| Courses to be taken Spring Semester | | |
| ATDI | 257 Automatics | 4 | | | | |
| DIES | 219 Heavy Duty Chassis | 4 | | | | |
| | | | | | | |

ATDI

264 Auto/Diesel Electrical/Elctrnc Sys.

| | | | PGEN | 275 Gas Turbines | 4 | |
|------|---------------------------------------|---|---------|---------------------------------------|---|--------|
| | | | IT | 111 Ind. Safety/Waste Mgmt | 2 | |
| JIES | 273 Diesel Shop Practices | 4 | | | | 10 |
| | JUNIOR YEAR | | | JUNIOR YEAR | | |
| | Courses to be taken Either Semester | | Course | es to be taken Either Semester | | |
| METL | 155 Machining Processes | 3 | | | | |
| | Gen Ed Dist (Area B) | 3 | ENGL | 366 Tech. Writing/Editing (Area A) | 3 | |
| | Gen Ed Dist (Area B) | 3 | | Gen Ed Dist (Area B) | 3 | |
| ENGL | 366 Tech. Writing/Editing (Area A) | 3 | | | | |
| ENGL | 112 Written Communication II | 3 | ENGL | 112 Written Communication II | 3 | 9 |
| | Courses to be taken Fall Semester | | Course | s to be taken Fall Semester | | |
| ATDI | 384 Auto/Diesel Electronics Apps | 4 | ATDI | 384 Auto/Diesel Electronics Apps | 4 | |
| | | | PGEN | 325 Electrical Power Transmission | 3 | 7 |
| | | | PGEN | 335 Data Logging & Instrumentation | 3 | |
| METL | 260 Repair & Maintenance Welding | 3 | | | | 10 |
| (| Courses to be taken Spring Semester | | Course | s to be taken Spring Semester | | |
| DIES | 314 Hydraulics & Pneumatics II | 4 | DIES | 314 Hydraulics & Pneumatics II | 4 | |
| | | | IT | 308 Industrial Electronics | 4 | |
| | | | DIES | 373 Diesel Shop Practices | 4 | 12 |
| | SENIOR YEAR | | | SENIOR YEAR | | |
| | Courses to be taken Either Semester | | Courses | s to be taken Either Semester | | |
| rsci | 304 Fuels/Lubricants (Area C) | 3 | | | | |
| | Gen Ed Dist (Area A) | 3 | | Gen Ed Dist (Area A) | 3 | |
| | | | | Gen Ed Dist (Area A) | 3 | 6 |
| | Courses to be taken Fall Semester | | Courses | s to be taken Fall Semester | | |
| ATDI | 400 Shop Procedures II | 2 | ATDI | 400 Shop Procedures II | 2 | |
| DIES | 420 Diesel Shop Mgmt. | 2 | PGEN | 455 Power Generation | 4 | |
| DIES | 440 Advanced Fuel Systems | 4 | DIES | 440 Advanced Fuel Systems | 4 | 10 |
| (| Courses to be taken Spring Semester | | Courses | s to be taken Spring Semester | | |
| DIES | 434 Current Model Year Tech (Capstor | 3 | DIES | 434 Current Model Year Tech (Capstor | 3 | |
| DIES | 450 Diagnosis of Power Shifts & HD Au | 4 | DIES | 450 Diagnosis of Power Shifts & HD AL | 4 | |
| | Electives | 6 | TSCI | 304 Fuels/Lubricants (Area C) | 3 | |
| | OR | | PGEN | 445 Control Applications | 3 | 13 |
| DIES | 479 Cooperative Education | 6 | | · · · | | |
| | | | | | | 120 |
| | | | | | | |
| | | | | color example | | |
| | | | DIES | 434 Current Model Year Tech (Capstone | 3 | CORE |
| | | | METL | 260 Repair & Maintenance Welding | 3 | OPTION |
| | | | • | Gen Ed Dist (Area A) | | |
| | prog rev dies power gen option | | | Gen Ed Dist (Area B) | | |
| | | | | Gen Ed Dist (Area C) | | |
| | | | | Gen Ed core courses | | |
| | | | | | | |

| NEW DROPPED MAJOR REVISIONX FOR INFORMATION ONLY | |
|--|--------------|
| College College of Technical Sciences Program Area Diesel Technology BS | Date 4-15-03 |
| Submitter My Chair/Dean Vunu Dete 4.75 | 03 |
| | _ |
| Please provide a brief explanation & rational for the proposed revision(s) | |

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 appropriate cells.

FRESHMAN YEAR

LIFT TRUCK OPTION
see back page for color explanation

| | | | | oce buck page for color explain | 141.011 | |
|------|--|-----|---------|--|---------|----|
| | FRESHMAN YEAR Courses to be taken Either Semester | | Courses | FRESHMAN YEAR s to be taken Either Semester | | |
| METL | 140 Intro. To Welding & Cutting | 3 | IT | 140 Intro. To Welding & Cutting | 3 | |
| ENGL | 111 Written Communication I | 3 | ENGL | 111 Written Communication I | 3 | |
| SPCH | 141 Fundamentals of Speech | 3 | SPCH | 141 Fundamentals of Speech | 3 | 9 |
| | Courses to be taken Fall Semester | | | Courses to be taken Fall Semester | | |
| DIES | 104 Introduction to Diesel Engines | 3 | | | | |
| | AND | | | | | |
| DIES | 114 Introduction to Diesel Engines Lab | 3 | | | | |
| | OR | | | | | |
| DIES | 115 Intro. to Diesel Fuel Systems | 4 | DIES | 115 Intro. to Diesel Fuel Systems | 4 | |
| ATDI | 134 Auto/Diesel Electrical/Elctrnc Sys. | 4 | ATDI | 134 Auto/Diesel Electrical/Elctrnc Sys. I | 1 4 | |
| DIES | 204 Intro. To Hydraulics & Pneumatics | 2 | DIES | 204 Intro. To Hydraulics & Pneumatics | 2 | |
| DIES | 214 Intro. To Hydraulics/ Pneum. lab | 2 | DIES | 214 Intro. To Hydraulics/ Pneum. lab | 2 | 12 |
| (| Courses to be taken Spring Semester | | | Courses to be taken Spring Semester | | |
| DIES | 104 Introduction to Diesel Engines | 3 | AUTO | 128 Engines | 4 | |
| | AND | | ATDI | 264 AD Elect/Electricity Sys II | 4 | |
| DIES | 114 Introduction to Diesel Engines Lab | 3 | IT | 111 Intro to Technology | 2 | 10 |
| | OR | | | | | |
| DIES | 115 Intro. to Diesel Fuel Systems | 4 | | | | |
| ATDI | 265 Heating & Air Conditioning | 4 | | | 1 | |
| | SOPHOMORE YEAR | | | SOPHOMORE YEAR | \ | |
| (| Courses to be taken Either Semester | | Courses | s to be taken Either Semester | | |
| MATH | 110 Math for Liberal Arts | 4 . | MATH | 110 Math for Liberal Arts | 4 | |
| | OR | | | OR . | | |
| MATH | 112 College Algebra | 3 | MATH | 112 College Algebra | 3 | |
| CIS | 110 intro to Computers | 3 | CIS | 110 intro to Computers | 3 | |
| | Gen Ed Dist (Area A, B, or C) | 3 | | Gen Ed Dist (Area A | 3 | |
| | | | | Gen Ed Dist (Area B | 3 | |

| | Courses to be taken Fall Semester | | | Courses to be taken Fall Semester | | |
|------|---|---|---------|--|---|----------|
| ATDI | 264 Auto/Diesel Electrical/Elctrnc Sys. | 4 | | | | |
| DIES | 216 Heavy Duty Power Trains | 4 | DIES | 216 Heavy Duty Power Trains | 4 | |
| DIES | 262 Diesel Engine Diagnosis & Repair | 2 | DIES | 262 Diesel Engine Diagnosis & Repair | 2 | |
| DIES | 272 Diesel Engine Diagnosis & Repair I | 4 | DIES | 272 Diesel Engine Diagnosis & Repair lat | 4 | 10 |
| | Courses to be taken Spring Semester | | | Courses to be taken Spring Semester | | |
| ATDI | 257 Automatics | 4 | | | | |
| DIES | 219 Heavy Duty Chassis | 4 | ATDI | 265 Heating & Air Conditioning | 4 | |
| DIES | 273 Diesel Shop Practices | 4 | DIES | 373 Diesel Shop Practices | 4 | 8 |
| | JUNIOR YEAR | | | JUNIOR YEAR | | |
| | Courses to be taken Either Semester | | | Courses to be taken Either Semester | | |
| METL | 155 Machining Processes | 3 | | | | |
| | Gen Ed Dist (Area B) | 3 | | Gen Ed Dist (Area A) | 3 | |
| | Gen Ed Dist (Area B) | 3 | | Gen Ed Dist (Area B) | 3 | |
| ENGL | 366 Tech. Writing/Editing (Area A) | 3 | | | | |
| ENGL | 112 Written Communication II | 3 | ENGL | 112 Written Communication II | 3 | 9 |
| | Courses to be taken Fall Semester | | Courses | s to be taken Fall Semester | | |
| ATDI | 384 Auto/Diesel Electronics Apps | 4 | ATDI | 384 Auto/Diesel Electronics Apps | 4 | |
| METL | 260 Repair & Maintenance Welding | 3 | ATDI | 383 Alt. Auto Power Systems | 3 | |
| | | | MTHL | 413 LPG Fuel Systems | 4 | 11 |
| | Courses to be taken Spring Semester | | Course | s to be taken Spring Semester | | |
| DIES | 314 Hydraulics & Pneumatics II | 4 | ΙΤ | 308 Inustrial Electronics | 4 | |
| | , | | TSCI | 304 Fuels/Lubricants (Area C) | 3 | |
| | | | | | | |
| | | | DIES | 314 Hydraulics & Pneumatics II | 4 | 11 |
| | SENIOR YEAR | | | SENIOR YEAR | | |
| | Courses to be taken Either Semester | | Courses | s to be taken Either Semester | | |
| TSCI | 304 Fuels/Lubricants (Area C) | 3 | | | | |
| | Gen Ed Dist (Area A) | 3 | _ | | | |
| | Courses to be taken Fall Semester | | | s to be taken Fall Semester | | |
| ATDI | 400 Shop Procedures II | 2 | ATDI | 400 Shop Procedures II | 2 | |
| DIES | 420 Diesel Shop Mgmt. | 2 | MTHL | 426 Elect Vehicle Motor Cntrl | 4 | |
| DIES | 440 Advanced Fuel Systems | 4 | DIES | 440 Advanced Fuel Systems | 4 | |
| | | | | Gen Ed Dist (Area C) | 3 | 13 |
| | Courses to be taken Spring Semester | | | s to be taken Spring Semester | | |
| DIES | 434 Current Model Year Tech (Capstor | 3 | DIES | 434 Current Model Year Tech (Capstone) | 3 | |
| DIES | 450 Diagnosis of Power Shifts & HD AL | 4 | DIES | 450 Diag of Power Shifts & HD Auto | 4 | |
| | Electives | 6 | MTHL | 428 Lift Structure Maint. & Repair | 4 | |
| | OR | _ | | Elective | 4 | 15 |
| DIES | 479 Cooperative Education | 6 | | | | 120 |
| | | | | | | |
| | | | | color example | | |
| | | | DIES | 434 Current Model Year Tech (Capstone) | 3 | CORE |
| | | | METL | 260 Repair & Maintenance Welding | 3 | OPTION |
| | prog rev dies lift truck option 4-15-03 | | | Gen Ed Dist (Area A) | | |
| | | | | Gen Ed Dist (Area B) | | |
| | | | | Gen Ed Dist (Area C) | | |
| | | | | Gen Ed core courses | | ir ital. |

Marine Name

| NEW DROPPED MAJOR REVISIONX FOR INFORMATION | ONLY |
|--|--------------|
| College College of Technology BS | Date 4-15-03 |
| Submitter Chair/Dean Light Signature Program Area Diesel Technology BS Chair/Dean Light Signature Chair/Dean Signature Signature | 5-03 |
| | |
| Please provide a brief explanation & rational for the proposed revision(s | s) |
| Revision of Diesel bachelor degree to include options | |

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 appropriate cells.

| | | appr | opriate ce | ells. | | |
|------|--|------|------------|--|---|----|
| ı | FRESHMAN YEAR Courses to be taken Either Semester | | | FIELD MAINTENANCE OPTION see back page for color explanation FRESHMAN YEAR | | |
| METL | 140 Intro. To Welding & Cutting | 3 | | | | |
| ENGL | 111 Written Communication I | 3 | | | | |
| SPCH | 141 Fundamentals of Speech | 3 | | | | |
| | Courses to be taken Fall Semester | | | Courses to be taken Fall Semester | | |
| DIES | 104 Introduction to Diesel Engines AND | 3 | DIES | 104 Introduction to Diesel Engines AND | 3 | |
| DIES | 114 Introduction to Diesel Engines Lab | 3 | DIES | 114 Introduction to Diesel Engines Lab | 3 | |
| | OR | | | OR | | |
| DIES | 115 Intro. to Diesel Fuel Systems | 4 | DIES | 115 Intro. to Diesel Fuel Systems | 4 | |
| ATDI | 134 Auto/Diesel Electrical/Elctrnc Sys. | 4 | ATDI | 134 Auto/Diesel Electrical/Elctrnc Sys. | 4 | |
| DIES | 204 Intro. To Hydraulics & Pneumatics | 2 | DIES | 204 Intro. To Hydraulics & Pneumatics | 2 | |
| DIES | 214 Intro. To Hydraulics/ Pneum. lab | 2 | DIES | 214 Intro. To Hydraulics/ Pneum. lab | 2 | |
| | | | IT | 140 Intro. To Welding & Cutting | 3 | 17 |
| (| Courses to be taken Spring Semester | | | Courses to be taken Spring Semester | | |
| DIES | 104 Introduction to Diesel Engines | 3 | DIES | 104 Introduction to Diesel Engines | 3 | |
| | AND | | | AND | | |
| DIES | 114 Introduction to Diesel Engines Lab | 3 | DIES | 114 Introduction to Diesel Engines Lab | 3 | |
| | OR | | | OR | | |
| DIES | 115 Intro. to Diesel Fuel Systems | 4 | DIES | 115 Intro. to Diesel Fuel Systems | 4 | |
| ATDI | 265 Heating & Air Conditioning | 4 | IT | 111 Indt. Safety & Waste Mgmt | 2 | |
| | | | IT | 150 Shielded Metal Arc Welding | 3 | |
| | | | ENGL | 111 Written Communication I | 3 | |
| | | | SPCH | 141 Fundamentals of Speech | 3 | 15 |
| r | SOPHOMORE YEAR | | | SOPHOMORE YEAR | | |
| | Courses to be taken Either Semester | | | | | |
| MATH | 110 Math for Liberal Arts | 4 | | | | |
| | OR | | | | | |
| MATH | 112 College Algebra | 3 | | | | |
| CIS | 110 intro to Computers | 3 | | | | |
| | Gen Ed Dist (Area A, B, or C) | 3 | | | | |
| | Courses to be taken Fall Semester | | | Courses to be taken Fall Semester | | |
| ATDI | 264 Auto/Diesel Electrical/Elctrnc Sys. | 4 | ATDI | 264 Auto/Diesel Electrical/Elctrnc Sys. | 4 | |
| DIES | 216 Heavy Duty Power Trains | 4 | DIES | 216 Heavy Duty Power Trains | 4 | |
| DIES | 262 Diesel Engine Diagnosis & Repair | 2 | DIES | 262 Diesel Engine Diagnosis & Repair | 2 | |
| DIES | 272 Diesel Engine Diagnosis & Repair I | 4 | DIES | 272 Diesel Engine Diagnosis & Repair I | 4 | |

154 Gas Arc Welding Processing

17

| | Courses to be taken Spring Semester | | | Courses to be taken Spring Semester | | |
|------|---|---|---------|---------------------------------------|---|--------|
| ATDI | 257 Automatics | 4 | MATH | 110 Math for Liberal Arts | 4 | |
| | | | | | | |
| | | | | | | |
| | | | CIS | 110 intro to Computers | 3 | |
| | | | | Gen Ed Dist (Area B) | 3 | |
| DIES | 219 Heavy Duty Chassis | 4 | ATDI | 265 Heating & Air Copnditioning | 4 | 14 |
| DIES | 273 Diesel Shop Practices | 4 | | | | |
| г | JUNIOR YEAR | | | JUNIOR YEAR | | |
| | Courses to be taken Either Semester | | | Courses to be taken Either Semester | | |
| METL | 155 Machining Processes | 3 | | | | |
| | Gen Ed Dist (Area B) | 3 | | Gen Ed Dist (Area C) | 3 | |
| | Gen Ed Dist (Area B) | 3 | | Gen Ed Dist (Area B) | 3 | |
| ENGL | 366 Tech. Writing/Editing (Area A) | 3 | ENGL | 366 Tech. Writing/Editing (Area A) | 3 | |
| ENGL | 112 Written Communication II | 3 | ENGL | 112 Written Communication II | 3 | 12 |
| | Courses to be taken Fall Semester | | Courses | s to be taken Fall Semester | | |
| ATDI | 384 Auto/Diesel Electronics Apps | 4 | ATDI | 384 Auto/Diesel Electronics Apps | 4 | |
| METL | 260 Repair & Maintenance Welding | 3 | ſΤ | 360 Repair & Maintenance Welding | 3 | |
| | | | IT | 155 Machining Processes | 3 | 10 |
| (| Courses to be taken Spring Semester | | Courses | s to be taken Spring Semester | | |
| DIES | 314 Hydraulics & Pneumatics II | 4 | DIES | 314 Hydraulics & Pneumatics II | 4 | |
| | | | IT | 355 Weld Certification I | 3 | |
| | | | DIES | 373 Diesel Shop Practices | 4 | 11 |
| r | SENIOR YEAR | | | SENIOR YEAR | | |
| 1 | Courses to be taken Either Semester | | (| Courses to be taken Either Semester | | |
| TSCI | 304 Fuels/Lubricants (Area C) | 3 | TSCI | 304 Fuels/Lubricants (Area C) | 3 | |
| | Gen Ed Dist (Area A) | 3 | | Gen Ed Dist (Area A) | 3 | 6 |
| | Courses to be taken Fall Semester | | Courses | to be taken Fall Semester | | |
| ATDI | 400 Shop Procedures II | 2 | ATDI | 400 Shop Procedures II | 2 | |
| DIES | 420 Diesel Shop Mgmt. | 2 | IT | 356 Weld Certification II | 3 | |
| DIES | 440 Advanced Fuel Systems | 4 | DIES | 440 Advanced Fuel Systems | 4 | 9 |
| (| Courses to be taken Spring Semester | | Courses | to be taken Spring Semester | | |
| DIES | 434 Current Model Year Tech (Capstor | 3 | DIES | 434 Current Model Year Tech (Capstor | 3 | |
| DIES | 450 Diagnosis of Power Shifts & HD AL | 4 | DIES | 450 Diagnosis of Power Shifts & HD Au | 4 | |
| | Electives | 6 | ΙΤ | 357 Weld Certification III | 2 | 9 |
| | OR | | | | | |
| DIES | 479 Cooperative Education | 6 | | | | 120 |
| | | | | | | |
| | | | | Color Example | | |
| | | | DIES | 434 Current Model Year Tech (Capstor | 3 | CORE |
| | | | IT | 360 Repair & Maintenance Welding | 3 | OPTION |
| | | | | Gen Ed Dist (Area A) | | |
| | | | | Gen Ed Dist (Area B) | | |
| | | | | Gen Ed Dist (Area C) | | |
| prog | rev dies field maintenance option 4-15-03 | | | Gen Ed core courses | | |
| | | | | | | |

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| | | KAWI/DE | | | | | | ATION | ONLY | |
|--------------|---|---------------|----------|---------|---------------|------------------|-------------|--------------|------------|--------|
| • | NEW DROPPED | _ | R REV | | | | R INFORM | | | 15.02 |
| Co | ollege College of Technical Science | | _ | | | ser recr | nology AA | , | Date 4- | 15-03 |
| | Submitter / Court signature | Chair | /Dean | M | yry | O. Zeg signal | | <u> 4·/5</u> | <u>.03</u> | |
| | Please provide a brief | ovnlanat | ion & | ratio | // nalifoi | ٠, | | vision/s | :1 | |
| | | | | | | | oposeu re | Visioni | • / | |
| | Changes made to Diesel Aas ogree as a | result of the | Bachelor | r degre | e change | es | | | | |
| Ple | ase provide in the space below a | "hefore | & afte | er" ni | cture | of the r | orogram w | ith the | changes | in the |
| | ogram noted. Attach appropriate | | | | | | | | | |
| | | | propria | | | | | Ū | • | Ü |
| | | | | | | | | | | |
| | FRESHMAN YEAR | | | | | | | | | |
| (| Courses to be taken Either Semester | | | | | | | | | |
| METL | 140 Intro. To Welding & Cutting | 3 | | | | | | | | |
| ENGL | 111 Written Communication I | 3 | | | | | | | | |
| SPCH | 141 Fundamentals of Speech | 3 | | | | | | | | |
| | Courses to be taken Fall Semester | | | | | | | | | |
| DIES | 104 Introduction to Diesel Engines | 3 | | | | | | | | |
| | AND | | | | | | | | | |
| DIES | 114 Introduction to Diesel Engines Lab | 3 | | | | | | | . 4 | AG. |
| | OR | | | | | | | • • | | |
| DIES | 115 Intro. to Diesel Fuel Systems | 4 | | | | | | | | |
| ATDI | 134 Auto/Diesel Electrical/Eletrne Sys. I | 4 | | | | | | ** | | |
| DIES | 204 Intro. To Hydraulics & Pneumatics 214 Intro. To Hydraulics/ Pneum. lab | 2 2 | | | | | | | | |
| DIES | 214 Intro. 10 Hydraulics/ Priediff. lab | 2 | | | | | | - 16. | | det d |
| (| Courses to be taken Spring Semester | | | | | | | | | |
| DIES | 104 Introduction to Diesel Engines | 3 | | | | | | | | |
| | AND | | | | | | | | | |
| DIES | 114 Introduction to Diesel Engines Lab | 3 | | | | | · | | | |
| | OR | | | | | | | | | |
| DIES | 115 Intro. to Diesel Fuel Systems | 4 | | | | | 1 | | 4 | |
| ATDI | 265 Heating & Air Conditioning | 4 | | | | | | | | |
| | CODUOMODE VEAD | | | | | | | | | |
| | SOPHOMORE YEAR Courses to be taken Either Semester | | | | | | | | | |
| MATH | 110 Math for Liberal Arts | 4 | | | | | | | | f |
| MALL | OR | 7 | | | | | | | | |
| MATH | 112 College Algebra | 3 | | | | | | | | |
| CIS | 110 intro to Computers | 3 . | | | | | | | | |
| | Gen Ed Dist (Area A, B, or C) | 3 . | | | | | | | | |
| | | | | | | | | | | |
| 470 | Courses to be taken Fall Semester | 4 | | | | | | | | |
| ATDI | 264 Auto/Diesel Electrical/Elctrnc Sys. II | 4 4 | | | | | | | | |
| DIES DIES | 216 Heavy Duty Power Trains 262 Diesel Engine Diagnosis & Repair | 2 | | | | | | | | |
| DIES | 272 Diesel Engine Diagnosis & Repair la | 4 | | | | | | | | |
| • | | • | | | | | | | | |
| (| Courses to be taken Spring Semester | | | | | | | | | |
| ATDI | 257 Automatics | 4 | | | | | | | | |
| DIES | 219 Heavy Duty Chassis | 4 | | | 444.1 | a o c : : | NA/ | | ^ | |
| DIES | 273 Diesel Shop Practices | 4 | ΙΤ | | 111 ln | a. Safety/ | Waste Mgmt | • | 2 | |

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| NEW DROPPED M. | AJOR REVISION FOR INFORMATION | ON ONLY _X_ | | |
|--|---|---------------------|--|--|
| College College of Technical S | ciences Program Area _Diesel Technology | Date <u>3/31/03</u> | | |
| SubmitterSignature | Chair/Dean Signature (indicates "college" level a | Date | | |
| Please provide a brief explana Add AUTO 128 as prerequis | ition & rationale for the proposed revision ite | n(s): | | |
| Please provide the following | nformation: | | | |
| College: | College of Technical Sciences | | | |
| Program Area: | Diesel Technology | | | |
| Date: | 3/31/03 | | | |
| Course Prefix & No.: | DIES 262 | | | |
| Course Title: Credits: | Diesel Engine Diagnosis and Repair 2 Credits | | | |
| Creatis. | 2 Cicuits | | | |
| Required by: Diesel Technology B.S. Core Selective in: N/A Elective in: N/A General Education: D Distribution Area | | | | |
| Lecture: Lecture/Lab: Contact hours lecture: Contact hours lab: | 2 | | | |

Current Catalog Description (include all prerequisites):

This course will include engine assembly and engine start-up after assembly. The course will also coordinate set-up, testing, and diagnosis of engine problems using test instruments and engine dynamometer. To be taken concurrently with DIES 272. Prerequisites: DIES 104 and DIES 114.

Proposed or New Catalog Description (include all prerequisites):

This course will include engine assembly and engine start-up after assembly. The course will also coordinate set-up, testing, and diagnosis of engine problems using test instruments and engine dynamometer. To be taken concurrently with DIES 272. Prerequisites: DIES 104 and DIES 114 or AUTO 128

Course Outcome Objectives:

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 _X_ | MAJOR REVISION | _FOR INFORMA | TION ONLY |
|--|---|-----------------------------|--------------|
| College College of Technical S | Sciences Program Area <u>Di</u> | esel Technology | Date 3/31/03 |
| Submitter Signature | Chair/Dean Signature (i | ndicates "college" level ap | Date |
| Please provide a brief explana We are dropping this course b | | | |
| Program Area: | College of Technical Sc Diesel Technology 3/31/03 | iences | |
| Course Title: Credits: | Diesel Shop Practices 4 Credits | | |
| Required by: Diesel Techno Selective in: N/A Elective in: N/A General Education: D Dist | | | |
| Lecture: Lecture/Lab: Contact hours lecture: Contact hours lab: | X 2 2 | | |
| Current Catalog Description (include all prerequisites): A course emphasizing actual shop operations: Long and short-term jobs covering all aspects of a vehicle. It also includes vehicle maintenance. Shop flat-rate procedures, work order and warranty claim procedures. | | | |
| Prerequisites: DIES 262 AN | D DIES 272. Course fee: | \$17.00 | |
| Proposed or New Catalog Description (include all prerequisites): Course Outcome Objectives: | | | |
| Additional instructional res and facilities). Please note: additional resources. N/A | - | - | - |

DIES 273 drop course rev form

| NEW _x_ DROPPED | MAJOR REVISION FOR INFORMATION ONLY |
|---|---|
| College _College of Technical S | Sciences Program Area _Diesel Technology _ Date 3/31/03 |
| Submitter Signature | Chair/Dean Date |
| <u> </u> | ation & rationale for the proposed revision(s): |
| We are creating a new course that v | will be used in the Diesel Broadfield Option of the Diesel Technology BS Degree |
| Please provide the following | information: |
| College: | College of Technical Sciences |
| Program Area: | Diesel Technology |
| Date: | 4-15-03 |
| Course Prefix & No.: | DIES 373 |
| Course Title: | Diesel Shop Applied Practices |
| Credits: | 4 Credits |
| Required by: Diesel Technology Selective in: N/A Elective in: N/A General Education: D Dist | |
| Lecture: | |
| Lecture/Lab: | X |
| Contact hours lecture: | 2 |
| Contact hours lab: | 4 |
| Current Catalog Description | on (include all prerequisites): |
| to equipment used in the industrict of on off highway equipment. Cou Course Outcome Objective Students enrolled examines the the specialized tools. The students will Additional instructional results. | |

Dies 373 new course rev form 4-15-03

| NEW DROPPED M | AJOR REVISION FOR INFORMATION ONLYX_ | | | | |
|---|---|--|--|--|--|
| College College of Technical Sciences Program Area Diesel Technology Date 3/31/03 | | | | | |
| Submitter | Chair/Dean Date | | | | |
| Signature | Chair/Dean Signature (indicates "college" level approval) | | | | |
| We are dropping the prerequisite o | Please provide a brief explanation & rationale for the proposed revision(s): We are dropping the prerequisite of ATDI 257 Automatics so students in minors or options can take the course and ATDI 257 Automatics is not any longer applicable as a prerequisite. | | | | |
| Please provide the following | information: | | | | |
| College: | College of Technical Sciences | | | | |
| Program Area: | Diesel Technology | | | | |
| Date: | 3/31/03 | | | | |
| Course Prefix & No.: | DIES 450 | | | | |
| Course Title: Diagnosis of Power Shifts and Heavy Duty Automatics Credits: 4 Credits Required by: Diesel Technology B.S. Core Selective in: N/A Elective in: N/A General Education: D Distribution Area | | | | | |
| Lecture: | | | | | |
| Lecture/Lab: | X | | | | |
| Contact hours lecture: | 2 | | | | |
| Contact hours lab: | 2 | | | | |
| Current Catalog Description (include all prerequisites): This is a course in Heavy Duty Power Shifts and Automatic Transmissions, 6000 GVW and larger. This course consists of lab and lecture time covering the components, theory of operations; diagnosis; using proper instrumentation and manuals; and repair; with emphasis on troubleshooting and failure analysis. Prerequisites: DIES 216; ATDI 257. Course Fee: \$15.00 | | | | | |
| Uronocod or Now Cotolog | IACAPINTIAN (INAIIIAA AII NYAYAAIIICITAC)! | | | | |

Proposed or New Catalog Description (include all prerequisites):

This is a course in Heavy Duty Fower Shifts and Automatic Transmissions, 6000 GVW and larger. This course consists of lab and lecture time covering the components, theory of operations, diagnosis, using proper instrumentation and manuals, and repair, with emphasis on troubleshooting and failure analysis. Prerequisites: DIES 216. Course Fee: \$15.00

Course Outcome Objectives:

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 _X_ FOR INFORMATION ONLY |
|--|---|
| College C | ollege of Technical Sciences_ Program Area _Industrial Technology_ Date 4-15-03 |
| Submitter | Chair/Dean Date 4-15-03 |
| Signatu | re Signature (indicates "college" level approval) |
| | explanation & rationale for the proposed revision(s): its to 2 and course description (Old METL) 357 |
| Please provide the fol | lowing information: |
| Department: | College of Technical Sciences: Industrial Technology |
| Program Area: | · · · · · · · · · · · · · · · · · · · |
| Date: | April 2003 |
| Course pref and no.: | IT 357 |
| | Welding Certification Procedures III |
| Credits: | 2 (sem) (was 3 credits) |
| Required by: | |
| General Education: | D |
| Lecture: | |
| Lecture/Lab: | X |
| Contact Hrs. Lecture: | |
| Contact Hrs. Lab: | arr 4 hrs/wk |
| • | se Description (include prerequisites): plications to be taken following IT 356. Prerequisite: IT 356. |
| Laboratory ap up to three ti | prise Description (include prerequisites): This cowese is for splications to be taken following IT 356. Prerequisite: IT 356. This course may be repeated mes for credit. Lab fee \$20.00 |
| | a continuation of IT 356. The purpose of this course is to provide additional opportunities for a coessfully select and perform various performance certifications. Course fee \$20.00 |
| Objectives: | |
| | tion and production of appropriate joint designs |
| | on preparation of various certification procedures |
| 3. Identi | fication of inspection parameters |
| 4. Adva | ncement in the extent of student performance qualification |
| New and/or Additional Special Facility Need labs): | al Equipment Required: al Library Resources Required: s Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer |

| NEW _X_ DROPPED | MAJOR REVISION FOR INFORMATION ONLY | | | |
|---|--|--|--|--|
| College College of Technical | Sciences Program Area <u>Diesel Technology</u> Date <u>3/31/03</u> | | | |
| Submitter | Chair/Dean Date Signature (indicates "college" level approval) | | | |
| Signature | Signature (indicates "college" level approval) | | | |
| Please provide a brief explanation & rationale for the proposed revision(s): We are creating a new course that will be used in the Lift Truck Option of the Diesel Technology BS Degree. | | | | |
| Please provide the following | information: | | | |
| College: | College of Technical Sciences | | | |
| Program Area: | Diesel Technology | | | |
| Date: | 3/31/03 | | | |
| Course Prefix & No.: | MTHL(413) 4XX PREFERRED | | | |
| Course Title: | LPG Fuel Systems | | | |
| Credits: | 4 Credits | | | |
| Required by: Diesel Techno | ology B.S Lift Truck Option | | | |
| Selective in: N/A | | | | |
| Elective in: N/A | | | | |
| General Education: D Dist | tribution Area | | | |
| Lecture: | | | | |
| Lecture/Lab: | X | | | |
| Contact hours lecture: | 2 | | | |
| Contact hours lab: | 4 | | | |
| Current Catalog Description (include all prerequisites): N/A | | | | |
| Proposed or New Catalog Description (include all prerequisites): This course examines the theory, operation and diagnosis of Impco systems, Aisan systems, Open-Loop & Closed-Loop systems, and Dana Epic systems. This course will also examine Lock-off/ filters, Regulators and Converters, Carburetors and Fuel solenoids. System testing and troubleshooting is heavily stressed and emphasized in this | | | | |

Course Outcome Objectives:

course. Lab fee \$20.00

Students enrolled in this course will learn the operation characteristics of LPG fuel systems. The students will learn proper safety and troubleshooting techniques in dealing with LPG 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.

| NEW _X_ DROPPED | MAJOR REVISION FOR INFORMATIO | ON ONLY | |
|--|--|--------------------|--|
| College College of Technical | Sciences Program Area <u>Diesel Technology</u> Da | ate <u>3/31/03</u> | |
| Submitter | Chair/Dean | Date | |
| Signature | Chair/Dean Signature (indicates "college" level approx | val) | |
| | ation & rationale for the proposed revision(s) that will be used in the Lift Truck Option of | | |
| Please provide the following | information: | | |
| College: | College of Technical Sciences | | |
| Program Area: | Diesel Technology | | |
| Date: | 3/31/03 | | |
| Course Prefix & No.: | MTHL (26)_preferred | | |
| Course Title: | Electrical Vehicle Motor Control | | |
| Credits: | 4 Credits | | |
| Required by: Diesel Techno | ology B.S Lift Truck Option | | |
| Selective in: N/A | | | |
| Elective in: N/A | | | |
| General Education: D Dist | ribution Area | | |
| Lecture: | | | |
| Lecture/Lab: | X | | |
| Contact hours lecture: | 2 | | |
| Contact hours lab: | 4 | | |
| Current Catalog Description (include all prerequisites): N/A | | | |
| Proposed or New Catalog Description (include all prerequisites): This course examines the theory, operation, and diagnosis of GE-SX and Curtis Motor control systems. This course | | | |

This course examines the theory, operation, and diagnosis of GE-SX and Curtis Motor control systems. This course will also examine PMC Controllers, MIB Controllers, SepEx & Series motors systems, and computer program usage of GE Sentry, Hyster & Dash programs for diagnosis and system adjustments. Specialized tool usage and proper safety techniques are incorporated throughout the course. Lab fee \$20.00

Course Outcome Objectives:

Students enrolled in this course will learn the operation characteristics of GE-SX and Curtis Motor control systems. The students will learn proper safety, troubleshooting and adjusting techniques when dealing with GE-SX and Curtis Motor control 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.

| NEW _X_ DROPPED | MAJOR REVISION FOR INFORMATION ONLY | | | | |
|---|--|--|--|--|--|
| College _College of Technical | Sciences Program Area <u>Diesel Technology</u> Date <u>3/31/03</u> | | | | |
| Submitter Signature | Chair/Dean Signature (indicates "college" level approval) | | | | |
| | Please provide a brief explanation & rationale for the proposed revision(s): We are creating a new course that will be used in the Lift Truck Option of the Diesel Technology | | | | |
| Please provide the following | information: | | | | |
| College: | the state of the s | | | | |
| Program Area: | Diesel Technology | | | | |
| Date: | 3/31/03 | | | | |
| Course Prefix & No.: | MTHL (28)-preferred | | | | |
| Course Title: | Lift Structure Maintenance & Repair | | | | |
| Credits: | 4 Credits | | | | |
| Required by: Diesel Techno | ology B.S Lift Truck Option | | | | |
| Selective in: N/A Elective in: N/A General Education: D Dist | ribution Area | | | | |
| Lecture: | | | | | |
| Lecture/Lab: | X | | | | |
| Contact hours lecture: | 2 | | | | |
| Contact hours lab: | 4 | | | | |
| Current Catalog Description (include all prerequisites): N/A | | | | | |

Proposed or New Catalog Description (include all prerequisites):

This course examines the theory, operation, and maintenance of the various types of masts booms, scissors, and attachments including sub-components such as load rollers and channels. This course also examines the inspection and adjustment of load chains and carriage hanger bushings. System testing and troubleshooting is heavily stressed and emphasized in this course. Lab fee \$20.00

Course Outcome Objectives:

Students enrolled in this course will learn the maintenance operation characteristics of masts, rollers, channels, load chains, and carriage hanger bushings. The students will learn proper safety, troubleshooting and adjusting techniques.

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

| | COCIOD ICE (IS | iori i oreir | |
|---|---------------------------|------------------------------------|--------------|
| NEW _X_ DROPPED | MAJOR REVISION | FOR INFORMATI | ION ONLY |
| College College of Technical | Sciences Program Area _ | Diesel Technology D | Date 3/31/03 |
| SubmitterSignature | Chair/Dean Signatur | e (indicates "college" level appre | Date |
| Please provide a brief explar We are creating a new cours Technology BS Degree. | nation & rationale for th | ne proposed revision(s |) : |
| Please provide the following | g information: | | |
| College: | College of Technical | Sciences | |
| Program Area: | Diesel Technology | | |
| Date: | 3/31/03 | , | |
| Course Prefix & No.: | | sed | |
| Course Title: | Gas Turbines I | | |
| Credits: | 4 Credits | | |
| Required by: Diesel Techn | ology B.S Power Gen | eration Option | |
| Selective in: N/A Elective in: N/A | | | |
| General Education: D Dis | tribution Area | | |
| Lecture: | | | |
| Lecture/Lab: | X | | |
| Contact hours lecture: | 2 | | |
| Contact hours lab: | 4 | | |
| Current Catalog Descripti N/A | on (include all prerequ | iisites): | |

Proposed or New Catalog Description (include all prerequisites):

This course examines the basic gas turbine operating cycle and constructions features of Axial-flow turbines. Theory, operation, and troubleshooting of the gas-fuel systems, liquid-fuel systems and lubricating oil systems are examined. Maintenance procedures and intervals specific to gas turbines are covered throughout the course. In addition, fundamentals of gas turbine control and protection are covered. IGV's, Start-up, Speed, Load, and Shutdown modes are discussed. Lab fee \$20.00

Course Outcome Objectives:

Students enrolled in this course will learn how gas turbines operate. Students will learn proper operation and troubleshooting techniques specific to gas turbine technology. Students will learn proper safety practices related to gas turbines. Students will understand how turbine control and protection systems integrate with the gas turbines to provide reliable, uninterrupted service.

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 _X_ DROPPED | MAJOR REVISION _ | FOR INFORMAT | TION ONLY |
|--|---|-----------------------------------|---------------------|
| College College of Technical | Sciences Program Area | Diesel Technology 1 | Date <u>3/31/03</u> |
| Submitter Signature | Chair/Dean Signatu | re (indicates "college" level app | Date |
| Please provide a brief explan We are creating a new course Technology BS Degree. | | | |
| Please provide the following College: Program Area: Date: Course Prefix & No.: | information: College of Technical Diesel Technology 3/31/03 PGEN 325 - PROP | | |
| Course Title: Credits: | Electrical Power Tran | smission | |
| Required by: Diesel Techno | ology B.S Power Ger | neration Option | |
| Selective in: N/A Elective in: N/A General Education: D Dist | ribution Area | | |
| Lecture: Lecture/Lab: Contact hours lecture: Contact hours lab: | X 2 2 | | |
| Current Catalog Descriptio N/A | n (include all prerequ | uisites): | |
| Proposed or New Catalog D | escription (include al | l prerequisites): | |

This course examines power distribution methods, automatic transfer switches, fuse panels, power grid structures, and remote diagnostics and monitoring. Current federal and state regulation procedures are examined throughout the content of the course. Proper diagnostic and safety methods are included in lecture and laboratory exercises. Lab Fee \$20.00

Course Outcome Objectives:

Students enrolled in this course will understand the relationship between the power generation systems and stationary grid & power structures. Students will be able to safely diagnose and repair power generation units using the appropriate diagnostic equipment.

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 _X_ DROPPED | MAJOR REVISION FOR INFORMATION ONLY | | | | |
|---|--|--|--|--|--|
| College College of Technical S | Sciences Program Area Diesel Technology Date 3/31/03 | | | | |
| SubmitterSignature | Chair/Dean Date | | | | |
| <u> </u> | Please provide a brief explanation & rationale for the proposed revision(s): We are creating a new course that will be used in the Power Generation Option of the Diesel Technology BS Degree. | | | | |
| Please provide the following | information: | | | | |
| College: | College of Technical Sciences | | | | |
| Program Area: | Diesel Technology | | | | |
| Date: | 3/31/03 | | | | |
| Course Prefix & No.: | PGEN(335)- PRUPOSED | | | | |
| Course Title: Credits: | Data Logging and Instrumentation 3 Credits | | | | |
| Required by: Diesel Techno | logy B.S Power Generation Option | | | | |
| Selective in: N/A | | | | | |
| Elective in: N/A | | | | | |
| General Education: D Dist | ribution Area | | | | |
| Lecture: | | | | | |
| Lecture/Lab: | X | | | | |
| Contact hours lecture: | 2 2 | | | | |
| Contact hours lab: | 2 | | | | |
| Current Catalog Description (include all prerequisites): N/A | | | | | |

Proposed or New Catalog Description (include all prerequisites):

This course examines the diagnostic methodology involved in current power generation units. Emphasis is placed on the safe use of specialized instrumentation and data acquisition equipment. The data will be utilized in order to provide maximum system efficiency and performance, while reducing unnecessary downtime. Proper diagnostic methods are included in lecture and laboratory exercises. Lab Fee \$20.00

Course Outcome Objectives:

Students enrolled in this course will understand the relationship between the power generation systems and instrumentation and data acquisition equipment. Students will be able to utilize sophisticated diagnostic equipment in order to maximize system productivity.

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 _X_ DROPPED | MAJOR REVISION FOR INFORMATION ONLY | | |
|---------------------------------|---|--|--|
| College College of Technical | Sciences Program Area <u>Diesel Technology</u> Date 3/31/03 | | |
| Submitter Signature | Chair/Dean Date | | |
| | ation & rationale for the proposed revision(s): that will be used in the Power Generation Option of the Diesel | | |
| Please provide the following | information: | | |
| College: | College of Technical Sciences | | |
| Program Area: | Diesel Technology | | |
| Date: | 3/31/03 | | |
| Course Prefix & No.: | PGEN(445)—proposed | | |
| Course Title: | Control Applications | | |
| Credits: | 3 Credits | | |
| Required by: Diesel Techno | logy B.S Power Generation Option | | |
| Selective in: N/A | | | |
| Elective in: N/A | | | |
| General Education: D Dist | ribution Area | | |
| Lecture: | | | |
| Lecture/Lab: | X | | |
| Contact hours lecture: | 2 | | |
| Contact hours lab: | $\overline{2}$ | | |
| Current Catalog Description N/A | n (include all prerequisites): | | |

Proposed or New Catalog Description (include all prerequisites):

This course examines the theory, operation, and diagnostics included in power generation control equipment such as digital control systems, remote monitoring, diagnostic controls, and industrial instrumentation controls. System control strategies such as redundant backup and parallel switching will be emphasized throughout the course. Proper safety and diagnostic methods are included in lecture and laboratory exercises. Lab fee \$20.00

Course Outcome Objectives:

Students enrolled in this course will understand the relationship between the power generation systems and control equipment. Students will understand the theory of control systems and their importance in power generation systems. Diagnostic and troubleshooting methodology will be utilized and incorporated into the overall power generation system.

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 _X_ DROPPED | MAJOR REVISION FOR INFORMA | ATION ONLY |
|--|---|---------------------|
| College College of Technical | Sciences Program Area Diesel Technology | Date <u>3/31/03</u> |
| Submitter Signature | Chair/Dean Signature (indicates "college" level a | Date |
| | ation & rationale for the proposed revision that will be used in the Power Generation | |
| Please provide the following | information: | |
| College: Program Area: Date: Course Prefix & No.: | College of Technical Sciences Diesel Technology 3/31/03 PGEN 455 — PROPOSED | |
| Course Title: Credits: | Power Generation 4 Credits | |
| Required by: Diesel Techno | ology B.S Power Generation Option | |
| Selective in: N/A Elective in: N/A General Education: D Dist | ribution Area | |
| Lecture: Lecture/Lab: Contact hours lecture: Contact hours lab: | X 2 4 | |

Current Catalog Description (include all prerequisites):

N/A

Proposed or New Catalog Description (include all prerequisites):

This course examines the relationship between the prime mover and the power generation source. This course will cover theory and operation of both manual and automatic voltage controls as well as the effect of resistive, capacitive and inductive loads. Power generation sources will be interconnected and adjusted using oscilloscopes in order to share real and reactive power. Safety considerations, droop, paralleling and load sharing are discussed throughout the course. Lab fee \$20.00

Course Outcome Objectives:

Students enrolled in this course will understand the relationship between the prime mover and power generation source. Students will be able to diagnose and repair power generation units using the appropriate diagnostic equipment.

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