

Pennsylvania College of Technology
Ford ASSET Program
 Ford STST Course Reference
 Current 08/22/2008

FALL SEMESTER 1st YEAR

AMT 110 Ford Automotive Fundamentals (5 Credits)

<i>Shop Practices</i>	TF1010016C
<i>Perfect Delivery Procedure</i>	30G03W0
<i>FIRTFT Wind Noise and Water Leaks</i>	30G10W0
<i>STARS2 for Technicians</i>	30G05W0
<i>FCSD SEO Orientation</i>	30G08W1
<i>On-Line Service Publication Navigation</i>	30G14W0
<i>Automotive Measuring Tools</i>	32S02W0
<i>Introduction to Noise, Vibration, and Harshness</i>	30S05W0
<i>Introduction to Portable Diagnostic Software (PDS)</i>	34G03W0
<i>Introduction to Integrated Diagnostic Software (IDS)</i>	30G11W0
<i>Technician Warranty Responsibilities</i>	30G09W0
<i>Using the Ford Technical Hotline</i>	30G04W1
<i>Vehicle Brake Systems</i>	38S01W0
<i>Brake Service Procedures</i>	38S02W0
<i>2006 Tire Pressure Monitor System</i>	30N14W0
<i>Brake System Diagnosis and Service (16 hours)</i>	38S07T0
<i>Engine Operation</i>	TF1010009C
<i>Engine Performance</i>	TF1010008C
<i>Steering and Suspension</i>	TF1010010C
<i>Climate Control</i>	TF1010012C
<i>Manual Transmission and Drivetrain</i>	TF1010013C
<i>Automatic Transmission</i>	TF1010014C
<i>Brakes</i>	TF1010015C
<i>Electrical Systems</i>	TF1010011C

AMT 120 Ford Automotive Electrical Systems (5 Credits)

<i>Basic Electrical Theory and Operation</i>	34S11W0
<i>Battery, Starting and Charging System Theory and Operation</i>	34S12W0
<i>Electrical Diagnosis Tools and Testing Part I</i>	34S13W0
<i>Electrical Diagnosis Tools and Testing Part II</i>	34S14W0
<i>Tow Command Trailer Brake Controller</i>	30G12W0
<i>FIRTFT – Battery Testing and Charging</i>	34G02W0
<i>FIRTFT – Audio Systems Diagnosis</i>	34G04W0
<i>Vehicle Security and Remote Start Systems</i>	30G02W1
<i>Electrical Systems Update</i>	34S-UPDATE
<i>Basic Electrical Diagnosis (40 hours)</i>	34S14T0

AMT 160 Ford Dealership Internship I (2 Credits)

SPRING SEMESTER 1st YEAR

AMT 130 Ford Automotive Engines, Diagnosis, Overhaul & Repair (5 Credits)

<i>Engine Operation Diagnosis and Repair 1</i>	32S06W0
<i>Engine Operation Diagnosis and Repair 1</i>	32S07W0
<i>Diesel Engine Repair</i>	52S01W0
<i>Diesel Engine Repair Update</i>	52S-UPDATE
<i>Engine Repair Classroom (32 hours)</i>	32S09T0

Spring semester 1st year continued

AMT 146 Ford Automotive Electronics and Diagnostics (5 Credits)

<i>Electronics Theory and Operation</i>	34S15W0
<i>Understanding Electronics</i>	34S16W0
<i>Networks & Multiplexing</i>	34S20W0
<i>Anti-theft Systems Operation and Testing</i>	34S21W0
<i>Entertainment and Navigation Systems Operation and Testing</i>	34S22W0
<i>Speed Control System Operation and Testing</i>	34S23W0
<i>Supplemental Restraint System Operation and Testing</i>	34S24W0
<i>Sync Operation and Testing</i>	34S26W0
<i>2005 Ford Crown Victoria Police Interceptor Fire Suppression System</i>	30N13W0
<i>FIRTFT- Programmable Module Installation (PMI)</i>	34G05W0
<i>Electronic Systems Diagnosis (40 hours)</i>	34S19T1

AMT 161 Ford Dealership Internship II (2 Credits)**SUMMER SEMESTER****AMT 141 Ford Vehicle Heating & Air Conditioning (4 Credits)**

<i>Climate Control Theory and Operation</i>	35S01W0
<i>Electronic Climate Control Operation and Diagnosis</i>	35S02W0
<i>Advanced Climate Control Systems Diagnosis (24 hours)</i>	35S05T0

AMT 162 Ford Dealership Internship III (2 Credits)**FALL SEMESTER 2nd YEAR****AMT 210 Ford Steering, Suspension, & Brake Systems (5 Credits)**

<i>Suspension Systems Theory and Operation</i>	33S11W0
<i>Steering Systems Theory and Operation</i>	33S12W0
<i>Steering & Suspension Alignment</i>	33S12W0
<i>Steering & Suspension Systems Tools and Testing</i>	33S14W0
<i>Advanced Brake System Theory and Operation</i>	38S03W0
<i>Advanced Brake System Diagnosis</i>	38S04W0
<i>Advanced Brake Systems Diagnosis and Service (24 hours)</i>	38S08T0
<i>Introduction to MTS 4000 Vibration Analyzer</i>	30G13W0
<i>Noise, Vibration, and Harshness Diagnosis Classroom (16 hours)</i>	30S06T0
<i>FIRTFT – F-Series Tire/Wheel Vibration Analysis</i>	33G01W0
<i>Steering and Suspension Systems (24 hours)</i>	33S15T0

AMT 220 Ford Engine Management Systems (5 Credits)

<i>Ignition System - Theory and Operation</i>	31S01W0
<i>Fuel & Air Inlet System – Theory and Operation</i>	31S02W0
<i>Exhaust/Emission System – Theory and Operation</i>	31S03W0
<i>Ignition/ Fuel & Air Inlet System – Relationships</i>	31S04W0
<i>OBD II Monitors</i>	31S05W0
<i>Diagnostic Process</i>	31S06W0
<i>Diagnostic Routines</i>	31S08W0
<i>Diagnosis and Testing OBD II</i>	31S12W0
<i>FIRTFT – Lean Engine Diagnosis</i>	30G15W0
<i>FIRTFT – Engine Misfire Diagnosis</i>	31G02W0
<i>Engine Performance Theory and Operation (16 hours)</i>	31S07T0
<i>Engine Performance Diagnosis and Testing (32 hours)</i>	31S10T0
<i>Advanced Engine Performance Diagnosis (32 hours)</i>	31S15T0
<i>Hybrid Escape/Mariner New Model (16 hours) ***</i>	30N10T0

AMT 220 Ford Engine Management Systems continued

<i>Diesel Update</i>	51S-UPDATE
<i>Diesel Engine - Theory and Operation</i>	51S03W0
<i>Diesel Fuel Supply and Fuel Injection Systems</i>	51S04W0
<i>Diesel Air Inlet and Exhaust</i>	51S05W0
<i>7.3L Diesel Diagnosis</i>	51S06W0
<i>6.0L Diesel Diagnosis</i>	51S07W0
<i>Diesel Diagnostic Procedures</i>	51S09W0
<i>6.4L DIT Engine Theory and Operation</i>	51S10W0
<i>Diesel Engine Performance Diagnosis and Testing (32 hours)</i>	51S08T1
<i>6.4 DIT Engine Diagnosis and Repair (24 hours)</i>	31S15T0
<i>FIRTFT – 6.0L Diesel Engine Basic Diagnostic Processes</i>	51G01W0
<i>FIRTFT – 7.3L Diesel Engine Injector, IPR, and CMP Sensor Testing</i>	51G02W0
<i>FIRTFT – 7.3L DIT Turbocharger Posttest</i>	51G03W0

AMT 163 Ford Dealership Internship IV (2 Credits)

SPRING SEMESTER 2nd YEAR

AMT 230 Ford Automotive Manual Transmissions, Drivelines, & Transfer Cases (5 Credits)

<i>Manual Transmission & Transaxle Operation</i>	36S10W0
<i>Manual Transmission & Transaxle Diagnosis</i>	36S11W0
<i>Differential & Driveline Systems Operation</i>	36S13W0
<i>Transfer Case & RWD Based 4WD Systems Operation</i>	36S14W0
<i>Transfer Case & RWD Based 4WD Systems Diagnosis</i>	36S15W0
<i>FWD Based 4WD Systems Operation and Diagnosis</i>	36S16W0
<i>F-SuperDuty/Excursion 4X4 Hub Service Posttest</i>	33G16W0
<i>FIRTFT – Axle Noise Diagnosis and Service</i>	36G01W0
<i>Manual Transmission and Transaxle Repair (16 hours)</i>	36S12T0
<i>Differential and 4WD System Diagnosis & Repair (24 hours)</i>	36S17T0

AMT 240 Ford Automatic Transmissions & Transaxles (5 Credits)

<i>Automatic Transmission Update</i>	37S-UPDATE
<i>Automatic Transmission Hydraulic/Mechanical Operation</i>	37S01W0
<i>Automatic Transmission Electronics</i>	37S02W0
<i>Automatic Transmission Diagnosis</i>	37S03W0
<i>Introduction to Automatic Transmission Theory and Operation</i>	37S10W0
<i>Automatic Transmission Electronic Control Systems Operation</i>	37S11W0
<i>Introduction to Automatic Transmission Diagnosis and Service</i>	37S12W0
<i>Automatic Transmission Diagnostic Techniques and Troubleshooting</i>	37S14W0
<i>4R70W/4R75E Diagnosis and Service</i>	37S17W0
<i>5R55S Diagnosis and Service</i>	37S18W0
<i>Torqshift Transmission Diagnosis and Service</i>	37S19W0
<i>6R60/6R75/6HP26 Diagnosis and Service</i>	37S20W0
<i>6F50 Diagnosis and Service</i>	37S21W0
<i>Automatic Transmission and Transaxle Service (40 hours)</i>	37S13T0
<i>Advanced Automatic Transmission Diagnosis (32 hours)</i>	36S15T0
<i>CVT Transaxle Classroom Training (16 hours)</i>	30N12T0

AMT 164 Ford Dealership Internship V (2 Credits)

Continued

Notes:

Courses listed in **Blue font** are instructor led courses. Hours listed in parentheses are determined by Ford Motor Company and are only an estimate. Credit is given for each course if the student scores 80% or better on the written final exam and demonstrates mastery of the final exam hands-on tasks. Credit for all instructor led courses are only entered after successful completion of the Penn College Ford ASSET program.

Courses listed in **Black font** are web courses courses. Web courses are generally assigned during Ford Dealership Internship periods to be done in the evening and on weekends. Credit for the Web Courses is automatically recorded in the Ford STARS system upon successful completion by the student. College credit is given for each listed web course during each of the listed AMT courses provided that the student has successfully completed the Web course

*** Tentative due to availability of vehicle donation and equipment purchase