# Automotive Power Sports (PST)

#### **PST 1110**

## **Two Stroke Engine Systems**

2

\* Corequisite(s): PST 1115

Studies the theory, diagnosis, and repair of two stroke engines. Emphasizes design and capabilities of the two stroke engine. Includes engine rebuilding techniques and principles, basics of engine fasteners, sealants, and tightening methods.

#### **PST 1115**

## Two Stroke Engine Systems Lab

1

\* Corequisite(s): PST 1110

Enhances the technical theory covered in the PST 1110 course. Provides an engine laboratory experience by following industry task lists for two stroke engine systems. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the task lists. Course Lab fee of \$12 for materials applies.

#### **PST 1120**

## **Constant Velocity Transmissions and Drive Systems**

2

\* Corequisite(s): PST 1125

Studies the theory, operation, diagnosis, and repair of Continuously Variable Transmissions (CVT) in snowmobiles, ATVs, and UTVs. Includes component identification and theory of tuning the CVT for optimal performance. Covers driveshaft and constant velocity boot inspection, diagnosis, and replacement.

#### PST 1125 Constant Velocity Transmissions and Drive Systems Lab

1

\* Corequisite(s): PST 1120

Enhances the technical theory covered in the PST 1120 course. Provides a transmission laboratory experience by following industry task lists for continuously variable transmission (CVT) systems. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the task lists. Course Lab fee of \$12 for materials applies.

#### PST 1210

#### Four Stroke Small Engine Systems

2

\* Corequisite(s): PST 1215

Studies the theory, diagnosis, and repair of four stroke small engines. Emphasizes design and capabilities of the four stroke small engine. Includes engine rebuilding techniques and principles, basics of engine fasteners, sealants, and tightening methods.

#### **PST 1215**

#### Four Stroke Small Engine Systems Lab

1

\* Corequisite(s): PST 1210

Enhances the technical theory covered in the PST 1210 course. Provides an engine laboratory experience by following industry task lists for four stroke small engine systems. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the task lists. Course Lab fee of \$12 for materials applies.

#### **PST 2110**

## **Snowmobile Systems**

2

\* Corequisite(s): PST 2115

Studies the operation, diagnosis, and repair of snowmobile systems. Emphasizes design, capabilities, and uses of the snowmobile system. Includes instruction on individual systems and how these systems interrelate into the platform as a whole. Stresses safety procedures. Covers advanced repair techniques.

## **PST 2115**

## Snowmobile Systems Lab

1

\* Corequisite(s): PST 2110

Enhances the technical theory covered in the PST 2110 course. Provides a laboratory experience for snowmobiles by following industry task lists for snowmobile systems. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the task lists. Covers advanced repair techniques. Stresses safety procedures.

## PST 2120

#### **ATV and UTV Systems**

2

\* Corequisite(s): PST 2125

Studies the history, operation, diagnosis, and repair of ATV and UTV systems. Emphasizes design, capabilities, and uses of the ATVs and UTVs. Includes instruction on individual systems and how these individual systems interact on the machine as a whole. Stresses safety procedures. Covers advanced repair techniques.

#### PST 2125 ATV and UTV Systems Lab

1

\* Corequisite(s): PST 2120

Enhances the technical theory covered in the PST 2120 course. Provides a laboratory experience for ATV and UTVs by following industry task lists for ATV and UTV systems. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the task lists. Covers advanced repair techniques. Stresses safety procedures.

#### **PST 2130**

## **Small Motorcycles and Scooters**

2

\* Corequisite(s): PST 2135

Studies the history, operation, diagnosis, and repair of small motorcycles including dirt bikes and dual purpose motorcycles and scooters. Emphasizes design, capabilities, and uses of the motorcycle systems. Examinies motorcycle systems and how these systems interact. Stresses safety procedures.

#### **PST 2135**

## **Small Motorcycles and Scooters Lab**

1

\* Corequisite(s): PST 2130

Enhances the technical theory covered in the PST 2130 course. Provides a laboratory experience for small motorcycles by following industry task lists for off-road bikes and dual purpose motorcycles and scooters. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual motorcycles and scooters and systems of major manufacturers in completing the task lists. Stresses safety procedures.

#### PST 2230 Street and Sport Motorcycles

2

\* Corequisite(s): PST 2235

Studies the history, operation, diagnosis, and repair of larger street motorcycles including cruiser style and sport bikes. Emphasizes design, capabilities, and uses of the complex street motorcycle systems. Includes advanced diagnosis and repair of complex street bike systems. Examines motorcycle systems and how these systems interact. Stresses safety procedures.

#### PST 2235

#### Street and Sport Motorcycle Lab

1

\* Corequisite(s): PST 2230

Enhances the technical theory covered in the PST 2230 course. Provides a laboratory experience for larger street motorcycles by following industry task lists for larger street motorcycles including cruiser style and sport bikes. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the tasks. Covers advanced repair techniques. Stresses safety procedures.

## **Course Descriptions**

#### **PST 2240**

#### **Outdoor Power Equipment**

2

\* Corequisite(s): PST 2245

Studies the operation, diagnosis, and repair of the most popular segments of the outdoor power equipment market. Emphasizes design, capabilities and uses of lawn mowers, chainsaws, trimmers, edgers, tillers, snow blowers, and generators. Includes instruction on basic maintenance and reliability of these units. Teaches rechargeable and electric outdoor power equipment. Stresses instruction of safety procedures.

#### **PST 2245**

## **Outdoor Power Equipment Systems Lab**

1

\* Corequisite(s): PST 2240

Enhances the technical theory covered in the PST 2240 course. Provides a laboratory experience for outdoor power equipment by following industry task lists for the most popular segments of the outdoor power equipment market. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual equipment of major manufacturers in completing the tasks. Includes the study of rechargeable and electric outdoor power equipment. Stresses safety procedures.

#### **PST 2250**

### **Personal Watercraft**

2

\* Corequisite(s): PST 2255

Studies the history, operation, diagnosis, and repair of personal watercraft systems. Includes the study of their unique drive systems and advanced cooling systems. Covers advanced diagnosis and repair of complex personal watercraft systems. Discusses hull repair and graphics installation. Stresses proper safety procedures.

#### **PST 2255**

#### **Personal Watercraft Systems Lab**

1

\* Corequisite(s): PST 2250

Enhances the technical theory covered in the PST 2250 course. Provides a laboratory experience for personal watercraft by following industry task lists for the most popular segments of the personal watercraft market. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual equipment of major manufacturers in completing the tasks. Covers advanced repair techniques of complex personal watercraft systems. Stresses safety procedures.