

# **Santa Rosa Junior College**

## **Program Resource Planning Process**

### ***Diesel Equipment Technology 2021***

#### **1.1a Mission**

The Diesel Equipment Technology program operates with a mission of serving the future and present workforce of the Sonoma County, North Bay and Redwood Empire areas. By providing education and training to entry-level students seeking a technician career, mid-range employees and journey-level occupied technicians, the program improves and helps maintain the professional level of service that is offered to customers that own and operate any of the following; agricultural machinery, construction equipment, marine or stationary power source engines and/or transportation vehicles.

The Industrial and Trade Technology department consists of the Automotive, Diesel, Machine Tool and Welding programs providing career technological training to students beginning and continuing their coursework within their chosen fields. We work closely with local industry leaders to make sure our programs consistently educate students to meet current industry standards and maintain close ties with local area high schools through the Tech-Prep program. We offer a learning environment that is open and affirming to all students, provide safety and environmental education as it relates to each program. Our instructional programs must be flexible to the needs of all students entering their chosen occupational fields and foster learning environments that allow each student to develop the necessary skills to achieve their educational goals. It is important that faculty provide instruction that reflects the latest industrial advancements, update program curriculum, and provide the latest equipment to maintain our individual laboratories. Our programs must meet the increasing and evolving environmental public requirements.

#### **1.1b Mission Alignment**

The Diesel Equipment Technology Program improves student skills with hands on training in diesel equipment repair allowing them to be more competitive in the job market.

## **1.1c Description**

The Diesel Equipment Technology (DET) program provides comprehensive and complete basic skill level training to all students. It offers educational opportunities that positively affect each student and the community in consideration of economic status. Moreover, the DET program offers a classroom environment that is welcoming and acceptable to all interested individuals without concern for prejudice. It provides programs and classes that will meet the needs of currently employed individuals, as well as environmental education that relates to the diesel and equipment technology trades.

The program maintains curriculum, facilities and equipment in a manner that encourages excellence in training and education. It partners with the area business leaders to provide communication and fluidity between the college and community, and provides a plan and practice for the recruitment of new students into the program. The DET program enhances and improves the life of the campus community, as well as coordinating with related programs both on and off campus to keep in-touch with current business practices. The program is responsible for the budget, facilities and equipment, while planning for the future needs.

## **1.1d Hours of Office Operation and Service by Location**

In order to reach as many students as possible, the Automotive, Machine Tool and Welding programs offer day and evening classes.

DET courses for Fall 2018 are moving to Hybrid night classes to match student enrolment demand.

The service center is located in the Lounibos Center Bldg. the administrative office hours are 9 am to 1 pm Monday through Thursday. The service center serves the Automotive, Diesel, Machine Tool and Welding Programs.

## **1.2 Program/Unit Context and Environmental Scan**

The diesel equipment industry has seen a increase in construction related work due to the economy and local fire damage. Trucking and agricultural job markets remain strong. There is a demand for entry level technicians in both the truck and agricultural markets.

The diesel program has seen a reduction in the support from industry due to the economy. Two large local employers have closed down, Redwood Peterbuilt and Bayshore International. The largest supporter of the diesel program, Peterson tractor has started to see and increase in need for technicians.

Technology in the diesel field continues to become more complex, with increases in fuel management costs and air quality standards. Computer controls have become mandatory on all diesel equipment, both on road and off. Without support from the industry, SRJC needs to invest in late model systems and the technology to diagnose these systems to prepare our students for the job market.

The Diesel program has articulation agreements with four local high schools.

## 2.1a Budget Needs

The diesel program has looked closely at expenditures in the 4000 and 5000 Categories. There has been a reduction in expenditures by using existing stock and repairing equipment in house. These steps have resulted in a savings in category 5000 expenditures. The diesel program cannot continue to operate at these levels, due to the depletion of stock and deferred maintenance.

This year we have had no equipment budget to pay for the needed equipment (see Instructional Equipment list) and yet we have significant need. Without equipment money we have been unable to continue with the appropriate re-fitting of the program with special tools and modern equipment.

### Combined Programs:

Rollover repair budget-combined program - A combined repair budget, that is dedicated to repair only, non-transferable and can rollover. It would be used to repair the equipment used by all Lounibos programs. Some years we go through our entire repair budget plus more, some years we barely tap into this fund. If we could have a rollover budget of \$2,000 a year to start increasing each year, so that any unused funds are moved to the next year, we could do repairs as needed, but also "save up" for major repairs.

# Santa Rosa Junior College - Program Unit Review

## Diesel Equipment Technology - FY 2019-20

### 2.1 Fiscal Year Expenditures

#### Santa Rosa Campus

Expenditure Category	Unrestricted Funds	Change from 2018-19	Restricted Funds	Change from 2018-19	Total	Change from 2018-19
Faculty payroll	\$55,354.90	-24.36%	\$0.00	0.00%	\$55,354.90	-24.36%
Adjunct payroll	\$13,848.31	>1000%	\$0.00	0.00%	\$13,848.31	>1000%

Classified payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
STNC payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Student payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Management payroll (and Dept Chairs)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Benefits (3000's)	\$30,757.57	-16.27%	\$0.00	0.00%	\$30,757.57	-16.27%
Supplies (4000's)	\$1,399.01	-60.11%	\$0.00	-100.00%	\$1,399.01	-61.67%
Services (5000's)	\$1,225.68	-27.77%	\$0.00	-100.00%	\$1,225.68	-70.67%
Equipment (6000's)	\$0.00	0.00%	\$226,357.67	36.63%	\$226,357.67	36.63%
<b>Total Expenditures</b>	<b>\$102,585.47</b>	<b>-11.66%</b>	<b>\$226,357.67</b>	<b>34.50%</b>	<b>\$328,943.14</b>	<b>15.66%</b>

**Petaluma Campus** (Includes Rohnert Park and Sonoma)

Expenditure Category	Unrestricted Funds	Change from 2018-19	Restricted Funds	Change from 2018-19	Total	Change from 2018-19
Faculty payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Adjunct payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Classified payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
STNC payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Student payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Management payroll (and Dept Chairs)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Benefits (3000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Supplies (4000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Services (5000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Equipment (6000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
<b>Total Expenditures</b>	<b>\$0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>

**Other Locations** (Includes the PSTC, Windsor, and other locations)

Expenditure Category	Unrestricted Funds	Change from 2018-19	Restricted Funds	Change from 2018-19	Total	Change from 2018-19
Faculty payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Adjunct payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Classified payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
STNC payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Student payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Management payroll (and Dept Chairs)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Benefits (3000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Supplies (4000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Services (5000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Equipment (6000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
<b>Total Expenditures</b>	<b>\$0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>

**Expenditure Totals**

Expenditure Category	Amount	Change from 2018-19	District Total	% of District Total
Total Expenditures	\$328,943.14	15.66%	\$153,674,065.73	0.21%
Total Faculty Payroll	\$69,203.21	-6.71%	\$49,910,820.26	0.14%
Total Classified Payroll	\$0.00	0.00%	\$22,755,404.45	0.00%
Total Management Payroll	\$0.00	0.00%	\$10,011,188.67	0.00%
Total Salary/Benefits Costs	\$99,960.78	-9.88%	\$109,759,005.10	0.09%
Total Non-Personnel Costs	\$228,982.36	31.98%	\$14,465,624.56	1.58%



## 2.1b Budget Requests

Rank	Location	SP	M	Amount	Brief Rationale
0001	ALL	08	07	\$5,000.00	Cost to repair equipment has been rising, and as equipment ages, more repairs are needed

## 2.2a Current Classified Positions

Position	Hr/Wk	Mo/Yr	Job Duties
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## 2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Department Chair	12.00	20.00	Evaluates faculty and staff, coordinates classes, reviews curriculum, on call for any problems. Trains new faculty, reviews and implements purchase orders, budget transfers, scheduling, and curriculum. Serves on department advisory committees (Machine, Automotive, Diesel, and Alternative Fuels)

## 2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
STNC	5.50	8.00	General shop clean up

## 2.2d Adequacy and Effectiveness of Staffing

# Santa Rosa Junior College - Program Unit Review

# Diesel Equipment Technology - FY 2019-20

## 2.2 Fiscal Year Employee Data and Calculations

### Employee Head Counts

Employee Category	Count	Change from 2018-19	District Total	% of District Total
Contract Faculty	1	0.00%	0	0.00%
Adjunct Faculty	1	0.00%	0	0.00%
Classified Staff	0	0.00%	0	0.00%
STNC Workers	0	0.00%	0	0.00%
Student Workers	0	0.00%	0	0.00%
Mgmt/Admin/Dept Chair	0	0.00%	0	0.00%

### Employee FTE Totals

FTE Category	FTE	Change from 2018-19	District Total	% of District Total
FTE-F - Faculty	1.3957	39.57%	0.0000	0.00%
FTE-CF - Contract Faculty	1.0000	0.00%	0.0000	0.00%
FTE-AF - Adjunct Faculty	0.3957	0.00%	0.0000	0.00%
FTE-C - Classified	0.0000	0.00%	0.0000	0.00%
FTE-ST - STNC	0.0000	0.00%	0.0000	0.00%
FTE-SS - Support Staff	0.0000	0.00%	0.0000	0.00%
FTE-SW - Student Workers	0.0000	0.00%	0.0000	0.00%
FTE-M - Management	0.0000	0.00%	0.0000	0.00%
FTE-DC - Department Chairs	0.0000	0.00%	0.0000	0.00%

### Student Data

Data Element	Value	Change from 2018-19	District Total	% of District Total
FTES-CR - Credit	9.2571	-47.69%	0.0000	0.00%
FTES-NC - Non-Credit	0.0000	0.00%	0.0000	0.00%
FTES - combined	9.2571	-47.69%	0.0000	0.00%
Students Enrolled/Served	0	-100.00%	0	0.00%

### Calculations

Data Element	Value	Change from 2018-19	District Total	% of District Total
FTE-S : FTE-F	6.6325	-62.52%	0.0000	0.00%
FTE-AF : FTE-CF	0.3957	0.00%	0.0000	0.00%
FTE-F : FTE-SS	0.0000	0.00%	0.0000	0.00%
FTE-F : FTE-M	0.0000	0.00%	0.0000	0.00%
FTE-SS : FTE-M	0.0000	0.00%	0.0000	0.00%
FTE-ST : FTE-C	0.0000	0.00%	0.0000	0.00%
Average Faculty Salary per FTE-F	\$49,582.52	-33.16%	\$0.00	0.00%
Average Classified Salary per FTE-C	\$0.00	0.00%	\$0.00	0.00%
Average Management Salary per FTE-M	\$0.00	0.00%	\$0.00	0.00%
Salary/Benefit costs as a % of total budget	30.39%	-22.08%	71.42%	42.55%
Non-Personnel \$ as a % of total budget	69.61%	14.11%	9.41%	739.51%
Restricted Funds as a % of total budget	68.81%	16.29%	19.16%	359.09%
Total Unit Cost per FTE-F	\$235,680.23	-17.13%	\$0.00	0.00%
Total Unit Cost per FTE-C	\$0.00	0.00%	\$0.00	0.00%
Total Unit Cost per FTE-M	\$0.00	0.00%	\$0.00	0.00%
Total Unit Cost per FTE-S	\$35,533.98	121.10%	\$0.00	0.00%
Total Unit Cost per student served/enrolled	\$0.00	-100.00%	\$0.00	0.00%



**2.2a Classified Positions** Employees paid from a Classified OBJECT code

<b>Name Last</b>	<b>First</b>	<b>Position</b>	<b>Hours</b>	<b>FTE</b>
<< No Employees >>				

**2.2b Management/Confidential Positions** Employees paid from a Management/Confidential OBJECT code

<b>Name Last</b>	<b>First</b>	<b>Position</b>	<b>Hours</b>	<b>FTE</b>
<< No Employees >>				

**2.2c STNC Workers** Employees paid from an STNC OBJECT code

<b>Name Last</b>	<b>First</b>	<b>Position</b>	<b>Hours</b>	<b>FTE</b>
<< No Employees >>				

**2.2d Student Employees** Employees paid from a Student Employee OBJECT code

<b>Name Last</b>	<b>First</b>	<b>Position</b>	<b>Hours</b>	<b>FTE</b>
<< No Employees >>				



## 2.2e Classified, STNC, Management Staffing Requests

Rank	Location	SP	M	Current Title	Proposed Title	Type
0001	ALL	01	02		DET Lab Assistant / Tool Room Manager	Classified

## 2.3a Current Contract Faculty Positions

Position	Description
Jesse Kosten	Diesel Program Coordinator and Diesel Instructor

**2.3b Full-Time and Part-Time Ratios**

<b>Discipline</b>	<b>FTEF Reg</b>	<b>% Reg Load</b>	<b>FTEF Adj</b>	<b>% Adj Load</b>	<b>Description</b>
Diesel	0.9800	0.9800	0.0000	0.0000	

## 2.3c Faculty Within Retirement Range

## 2.3d Analysis of Faculty Staffing Needs and Rationale to Support Requests

The Diesel/Equipment Technology program is currently operational with one full-time certificated faculty member. Student enrollments have increased at night over the past several years, and with the class section reductions the class size has grown. This has put an added burden on the full time instructor. Additional funding is needed to hire a support person to help with tool room management and to help watch all the students during lab classes; it is difficult to run a truly safe lab class with just one instructor.

The Diesel Technology Program also needs at least one adjunct faculty. It is important to have an adjunct to back up the full-time instructor in case of illness or disability. Also, with climbing enrollment we will need an additional instructor to allow more sections to be offered.

We have an open adjunct pool, but have had no applicants. It is difficult to draw instructors from industry due to the high incomes that they have from working as technicians, lack of qualified applicants(AA degrees), and the hours that they put in per week. It takes a unique person who really wants to teach, and is willing to give up precious time with their family to train others, to take a job as an adjunct instructor.

There have been no adjunct interview in recent memory for the reasons just noted.

## Santa Rosa Junior College - Program Unit Review Diesel Equipment Technology - FY 2019-20

### 2.3a Contract Faculty Positions Employees paid from a Contract Faculty OBJECT code

Name Last	First	Position	Hours	HR FTE	DM FTE
Kosten	Jesse	Faculty	0.00	1.0000	0.0000
<b>Totals</b>			<b>0.00</b>	<b>1.0000</b>	<b>0.0000</b>

**2.3b Adjunct Faculty Positions** Employees paid from an Adjunct Faculty OBJECT code

<b>Name Last</b>	<b>First</b>	<b>Position</b>	<b>Hours</b>	<b>FTE</b>
Kosten	Jesse		121.44	0.3957
<b>Totals</b>			<b>121.44</b>	<b>0.3957</b>





## 2.3e Faculty Staffing Requests

Rank	Location	SP	M	Discipline	SLO Assessment Rationale
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## 2.4b Rationale for Instructional and Non-Instructional Equipment, Technology, and Software

**All Data/Mitchell Prodemand:** Current information is critical for repairs on newer vehicles. We work on many late model vehicles during labs, both light duty and heavy duty passenger cars and heavy duty trucks. We need both light and heavy duty service information. This requires a yearly subscription of \$3000.

**Snap-on Precision Measurement Instruments Certification** The successful completion of the Snap-on Precision Measurement Instruments Certification enables graduates to demonstrate a solid understanding of the fundamentals of working with precision measurement instruments. The skills acquired during this comprehensive training are valuable TOOLS FOR LIFE that can lead to rewarding careers in a vast array of industries in the global marketplace.

Precision measuring is the cornerstone of quality in products and services many people rely upon each day. Starrett, Snap-on, and NC3 combined their industrial experience and expertise to create a certification that includes hands-on training on instruments that are vital to engineering, manufacturing, aerospace, power generation, and natural resources, to name a few. Those who earn this certification will be proficient in the use of a variety of instruments ranging from tapes and rules to calipers and micrometers.

**Snap-on Torque Certification:** In-depth knowledge of torque theory, and experience in wrench selection and torque application form TOOLS FOR LIFE that enable technicians to be productive, efficient, and safe when using torque instruments in a wide variety of industries.

Whether just starting out, or a veteran of the shop, a working knowledge of torque theory and application is a fundamental requirement for any engineering, maintenance service, or repair position. As the leader in torque instruments, Snap-on developed a certification course that includes hands-on classroom training and advanced lab exercises.

This certification provides a widely recognized endorsement of technical expertise and demonstrated achievement. Students who successfully complete the course obtain the training and professionalism required to be safe, accurate, and proficient on the job.

**Fluid Power Training Systems** Model MF500-HT-TSE Hydrostatic Transmission Training System and optional MF500-IS-TSE Hydraulic Implement and Articulated Steering System Module

Skid-steer type loaders are today's hydrostatic transmission training systems – you will find one in the lab of almost every technical college in the country.

However, these types of vehicles offer a host of unique safety hazards. Some of the more serious hazards include: unexpected vehicle motion, rotating wheels and shafts; noxious exhaust emissions; hot engine components; improperly supported vehicle, disconnecting of critical manufacturer installed safety devices, confined space, etc.

The MF500-HT-TSE eliminates ALL of the hazards associated with using a skid-steer type loader as a hydrostatic transmission training system because it is designed for educators not for a construction site.

#### **Kubota Tech Program - Level 1 Certifications**

Kubota and NC3 help shape tomorrow's workforce through certification programs, industry supported curriculum and hands-on training. Kubota recognizes the need for highly skilled technicians to support customers. Kubota Tech Certification Program provides students with the knowledge and skills needed to support customers on Kubota equipment effectively and efficiently.

- Pre-Delivery Inspection & Assembly
- Preventative Maintenance Inspection
- Basic Maintenance Procedures
- Basic Electrical

## 2.4c Instructional Equipment Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0004	Santa Rosa	01	01	Kubota Tech Program - Level 1 Certifications	1	\$145,000.00	\$145,000.00	Jesse Kosten	2370	Jesse Kosten

## 2.4d Non-Instructional Equipment and Technology Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
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## 2.4f Instructional/Non-Instructional Software Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0050	Santa Rosa	04	01	AllData/Mitchell	1	\$3,000.00	\$3,000.00	Jesse Kosten	2370	Jesse Kosten

## 2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0001	Santa Rosa	04	07	Urgent	Outside of Lounibos	2370	\$5,000.00	Repair lighting in front and back of shop to make safe for students and staff at night.
0002	Santa Rosa	05	02	Urgent	Lounibos	2370	\$2,000.00	Replace water fountain with fountain with water bottle filler station.
0003	Santa Rosa	04	07	Urgent	Out side of Lounibos	2370	\$100,000.00	Repair outside covered areas and raise roof structure to accommodate the trucks and equipment.
0004	Shone Farm	01	01	1 Year	Shone Farm	New	\$5,000,000.00	Diesel repair shop at Shone Farm or another offsite location.

## **2.5b Analysis of Existing Facilities**

The current Diesel shop located in the Lounibus building is inadequate. We lack the space to effectively work on large vehicles. We commonly have up to 10 to 15 vehicles being worked on during a normal lab session. Most of these vehicles are outside the shop due to limited shop space.

The current facility needs to have outside storage areas repaired, roofs lifted, and lighting repaired. It is currently dark and wet outside during the school year, and difficult to utilize outdoor areas during night classes.

The Diesel Equipment Technology program should be relocated to the Shone Farm or similar large location. A new shop and classroom would need to be constructed.

Relocating the Diesel program would have many benefits to our students and SRJC:

- With the increase in shop size the impacted conditions would be alleviated. Students would have the shop space to work indoors out of the weather.
- The agricultural equipment at the Shone Farm could be maintained and repaired by the Diesel program students. Approximately two thirds of our diesel students will go to work on agricultural or construction equipment, both types of equipment are located at the Shone Farm.
- There is room to operate and test equipment. We have no area on the SRJC main campus to operate construction and agricultural equipment.

The existing shop, 2370, can be utilized by other programs in the Lounibus building. There is a need for more shop space in Lounibus and moving the Diesel program would free up more space for other programs, like welding.

## **3.1 Develop Financial Resources**

Will be required Spring 2018

## **3.2 Serve our Diverse Communities**

We hire through the SRJC Human Resources department using the standard recruitment methods.

We try to recruit both students and instructors from local businesses that service a wide demographic area. Also, the Diesel Department encourages faculty participation in classes and flex sessions (offered on or off campus) that broaden our staff's cultural awareness and sensitivity.

## **3.3 Cultivate a Healthy Organization**

Allow time during normal work hours to attend training that allows the employees to better do their job, such as PRPP, CIS, forklift and any other training applicable to their jobs.

## **3.4 Safety and Emergency Preparedness**

Jesse Kosten, Dave Yoast and Rick Davis are the current emergency preparedness personnel.

## **3.5 Establish a Culture of Sustainability**

The Diesel program recycles all metals from replaced components. All oils/filters are gathered and sent to a recycler. Cardboard and other recyclable items are separated and recycled.

## **4.1a Course Student Learning Outcomes Assessment**

The assessment cycle will be two classes each semester, one half of the offered classes each school year. This will allow each class to be assessed every other academic year.

All DET classes have been assessed over the last two academic years.

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Course	SLO #s	Participating Faculty	Semester Initiated or to Be Initiated	Semester Completed	Comments	Year of Next Assessment
DET 179 (80)	1	B Gully	F 13	F 13		F 14
DET 181 (81)	1	B Gully	S 12	S 12		S 14
DET 182a (82a)	1	B Gully	S 12	S 12		S 14
DET 182b (82b)	1	B Gully	S 13	S 13		F 14
DET 184 (84)	1	B Gully	F 13	F 13		S 15
DET 185 (85)	1	B Gully	F 13	F 13		F 15
DET 188 (88)	1	B Gully	S 13	S 13		S 15
DET 189 (89)	1	B Gully	S 13	S 13		F 15

## 4.1b Program Student Learning Outcomes Assessment

The DET certificate programs have been assessed this year. Assessment reports are in Sharepoint.

2. .

Course	SLO #s	Participating Faculty	Semester Initiated or to Be Initiated	Semester Completed	Comments	Year of Next Assessment
DET 179 (80)	1	B Gully	F 13	F 13		F 14
DET 181 (81)	1	B Gully	S 12	S 12		S 14
DET 182a (82a)	1	B Gully	S 12	S 12		S 14
DET 182b (82b)	1	B Gully	S 13	S 13		F 14
DET 184 (84)	1	B Gully	F 13	F 13		S 15
DET 185 (85)	1	B Gully	F 13	F 13		F 15

DET 188 (88)	1	B Gully	S 13	S 13		S 15
DET 189 (89)	1	B Gully	S 13	S 13		F 15



## 4.1c Student Learning Outcomes Reporting

Type	Name	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented
Course	Det 80 - Diesel Shop Practices	Fall 2013	Fall 2013	N/A
Course	Det 81 - Prevent Maint	Spring 2012	Spring 2012	N/A
Course	Det 82a-Diesel Engine Overhaul	Spring 2012	Spring 2012	N/A
Course	Det 82b-Diesel Fuel Systems	Spring 2013	Spring 2013	N/A
Course	det 84 Hydraulics	Fall 2013	Fall 2013	N/A
Course	Det 85 - Heavy Duty Chassis	Fall 2013	Fall 2013	N/A
Course	Det 88 - HD Power Trans	Spring 2013	Spring 2013	N/A
Course	Det 89 - HD Electrical	Spring 2013	Spring 2013	N/A

## 4.2a Key Courses or Services that address Institutional Outcomes

Course/Service	1a	1b	1c	2a	2b	2c	2d	3a	3b	4a	4b	5	6a	6b	6c	7
det 179	X	X	X	X	X	X	X	X	X	X	X	X				X
det 181	X	X	X	X	X		X	X	X	X	X	X				X
Det 182a	X	X	X	X	X		X	X	X	X	X	X				X
det 182b	X	X	X	X	X		X	X	X	X	X	X				X
det 184	X	X	X	X	X		X	X	X	X	X	X				X
det 185	X	X	X	X	X	X	X	X	X	X	X	X				X
det 188	X	X	X	X	X		X	X	X	X	X	X				X
det 189	X	X	X	X	X		X	X	X	X	X	X				X

## 4.2b Narrative (Optional)

All of our courses have components of the institutional student learning outcomes. In reviewing the data it appears that we are strong in most of the goals and only failing to meet the institutional student learning outcome regarding personal health. We will see if there are more ways to work this into our program in the future.

## 5.0 Performance Measures

Not applicable

## 5.1 Effective Class Schedule: Course Offerings, Times, Locations, and Delivery Modes (annual)

The Industrial and Trade Technology department offers both day and evening courses and has recently started offering weekend classes. We have not expanded to other campuses/sites as there are no shops there.

We do not offer a distance learning component as all the current classes are hands on. We are trying to identify courses that can be modified to be offered online.

The Diesel Technology program offers a balanced approach to training, unique in our experience. The core classes are offered from 12:30 p.m. until 5:00 p.m., and from 6:00 p.m. until 10:30 p.m. every semester. The classes are eight weeks long, and at mid-semester the afternoon and evening classes switch schedules (afternoon becomes evening, and evening becomes afternoon). This has the intended effect of allowing students to get all the core classes during the same timeframe; either afternoon or evening.

# Santa Rosa Junior College - Program Unit Review

## Diesel Equipment Technology - FY2017-2018 plus current FY Summer and Fall)

### 5.1 Student Headcounts The number of students enrolled in each Discipline at first census (duplicated headcount).

#### Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0	101	80	0	76	91	0	68	

#### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0	0	0	0	0	0	0	0	

#### Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0	0	0	0	0	0	0	0	

#### ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0	101	80	0	76	91	0	68	



**Other Locations** (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**ALL Locations** (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.0	14.4	6.7	0.0	12.7	9.1	0.0	11.3	0.0

## 5.3 Instructional Productivity

The Diesel Technology Program holds steady at about a 14.75 ratio. The calculation of what an FTES is, is baffling to us to say the least, but if we are below the 18.75 tipping point it is probably because our class sizes are limited to 20 with a wait list of 3 due to the dangers of running any more students than that in a lab. The Bureau of Automotive Repair requirements for lab classes are: 25 students maximum...any more students than that requires a second instructor in the lab.

## Santa Rosa Junior College - Program Unit Review Diesel Equipment Technology - FY 2017-18 (plus current FY Summer and Fall)

**5.3 Instructional Productivity** The ratio of Full-Time Equivalent Students (FTES) to Full-Time Equivalent Faculty (FTEF) in each Discipline at first census.

### Santa Rosa Campus

Diesel/Equipment Technology		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	<b>FTES</b>	0.00	13.70	11.77	0.00	11.32	13.41	0.00	10.13	6.2
	<b>FTEF</b>	0.00	1.11	0.98	0.00	0.97	1.01	0.00	1.00	0.7
	<b>Ratio</b>	<b>0.00</b>	<b>12.36</b>	<b>11.98</b>	<b>0.00</b>	<b>11.65</b>	<b>13.33</b>	<b>0.00</b>	<b>10.16</b>	<b>8.2</b>

### Petaluma Campus (Includes Rohnert Park and Sonoma)

Diesel/Equipment Technology		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	<b>FTES</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	<b>FTEF</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	<b>Ratio</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0</b>

### Other Locations (Includes the PSTC, Windsor, and other locations)

Diesel/Equipment Technology		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	<b>FTES</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	<b>FTEF</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	<b>Ratio</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0</b>

### ALL Locations (Combined totals from ALL locations in the District)

Diesel/Equipment Technology		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	<b>FTES</b>	0.00	13.70	11.77	0.00	11.32	13.41	0.00	10.13	6.2
	<b>FTEF</b>	0.00	1.11	0.98	0.00	0.97	1.01	0.00	1.00	0.7
	<b>Ratio</b>	<b>0.00</b>	<b>12.36</b>	<b>11.98</b>	<b>0.00</b>	<b>11.65</b>	<b>13.33</b>	<b>0.00</b>	<b>10.16</b>	<b>8.2</b>

## 5.4 Curriculum Currency

The Diesel major certificate have been revised this year. The diesel advisory board has approved these changes.

DisciplineNbr	VersionNbr	TermCourseLastTaught	DateLastReview	CourseStatus	ApprovalStatus	Cred
DET 179	6	Fall 2017	1/22/2018	Changed Course	Approved	Yes
DET 181	7	Spring 2017	1/22/2018	Changed Course	Approved	Yes
DET 182A	5	Spring 2018	1/22/2018	Changed Course	Approved	no
DET 182B	5	Spring 2018	1/22/2018	Changed Course	Approved	no
DET 184	7	Fall 2017	1/22/2018	Changed Course	Approved	no
DET 185	7	Fall 2017	1/22/2018	Changed Course	Approved	no
DET 188	7	Spring 2018	1/22/2018	Changed Course	Approved	no
DET 189	7	Fall 2011	1/22/2018	Changed Course	Approved	no

## 5.5 Successful Program Completion

We encourage students to apply for their certificates to improve their employment opportunities. We award about 3 full Diesel certificates a year. This number would improve if A & R automatically awarded them, many students do not do the paperwork needed to receive their certificates.

The demand for entry level mechanics is generally high. Many students are already employed in the repair industry. These students will enroll in only the classes they need to improve their skills. They do not complete all classes for the certificate due to the demands on their time with full time employment.

Currently we are offering several small certificates to the diesel program. These certificates are aligned with ASE truck certifications. This will increase the number of certificates available to working students and give them benchmarks toward the Associate degree.

Cert Code	TOP	Description	Prog Awr	2002 2003	2003 2004	2004 2005	2005 2006	2006 2007	2007 2008
5065	094700	Diesel and Heavy Duty Engine (T1 and T2)	E	0	0	0	0	0	0
5064	094700	Diesel Chassis (T4 and T5)	E	0	0	0	0	0	0
5060	094700	Diesel Electrical/Electronics (T6)	E	0	0	0	0	0	0
2019	094700	Diesel Equipment Technology	S	0	0	1	2	0	2
3033	094700	Diesel Equipment Technology	T	0	4	2	1	1	3
5061	094700	Diesel Heating, Ventilation and Cooling (T7)	O	0	0	0	0	0	0
5063	094700	Diesel Power Train (T3)	E	0	0	0	0	0	0

5062	094700	Diesel Preventative Maintenance (T8)	E	0	0	0	0	0	0
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## 5.6 Student Success

### Santa Rosa Junior College - Program Unit Review Diesel Equipment Technology - FY 2017-18 (plus current FY Summer and Fall)

**5.6a Retention** The percentage of students receiving a grade of A,B,C,D,CR, or I in each Discipline (duplicated headcount).

#### Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.0%	75.5%	83.8%	0.0%	84.2%	87.9%	0.0%	84.8%	95.3%

#### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

#### Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

#### ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.0%	75.5%	83.8%	0.0%	84.2%	87.9%	0.0%	84.8%	95.3%

# Santa Rosa Junior College - Program Unit Review

## Diesel Equipment Technology - FY 2017-18 (plus current FY Summer and Fall)

**5.6b Successful Course Completion** The percentage of students receiving a grade of A,B,C, or CR in each Discipline (duplicated headcount).

### Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.0%	64.3%	70.0%	0.0%	82.9%	87.9%	0.0%	83.3%	90.9%

### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

### Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

### ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.0%	64.3%	70.0%	0.0%	82.9%	87.9%	0.0%	83.3%	90.9%



# Santa Rosa Junior College - Program Unit Review

## Diesel Equipment Technology - FY 2017-18 (plus current FY Summer and Fall)

**5.6c Grade Point Average** The average GPA in each Discipline (UnitsTotal / GradePoints).

### Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.00	2.03	2.13	0.00	2.86	2.80	0.00	2.73	3

### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0

### Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0

### ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Diesel/Equipment Technology	0.00	2.03	2.13	0.00	2.86	2.80	0.00	2.73	3

## 5.7 Student Access

### Santa Rosa Junior College - Program Unit Review Diesel Equipment Technology - FY 2017-18 (plus current FY Summer and Fall)

**5.7a Students Served - by Ethnicity** The number of students in each Discipline at first census broken down by ethnicity (duplicated headcount).

**ALL Locations** (Combined totals from ALL locations in the District)

Diesel/Equipment Technology	Ethnicity	2015-16	Percent	2016-17	Percent	2017-18	Percent	2018-19	Percent
	White	122	73.1%	102	63.0%	57	53.8%	2	0.0%
	Asian	0	0.0%	2	1.2%	0	0.0%		
	Black	4	2.4%	0	0.0%	0	0.0%		
	Hispanic	37	22.2%	46	28.4%	38	35.8%		
	Native American	0	0.0%	0	0.0%	0	0.0%		
	Pacific Islander	0	0.0%	0	0.0%	0	0.0%		
	Filipino	0	0.0%	0	0.0%	0	0.0%		
	Other Non-White	4	2.4%	0	0.0%	0	0.0%		
	Decline to state	0	0.0%	12	7.4%	11	10.4%		
	<b>ALL Ethnicities</b>	<b>167</b>	<b>100.0%</b>	<b>162</b>	<b>100.0%</b>	<b>106</b>	<b>100.0%</b>		

# Santa Rosa Junior College - Program Unit Review

## Diesel Equipment Technology - FY 2017-18 (plus current FY Summer and Fall)

**5.7b Students Served - by Gender** The number of students in each Discipline at first census broken down by gender (duplicated headcount).

**ALL Locations** (Combined totals from ALL locations in the District)

Diesel/Equipment Technology	Gender	2015-16	Percent	2016-17	Percent	2017-18	Percent	2018-19	Percent
	Male	151	90.4%	142	87.7%	106	100.0%	106	100.0%
	Female	9	5.4%	3	1.9%	0	0.0%	0	0.0%
	Unknown	7	4.2%	17	10.5%	0	0.0%	0	0.0%
	<b>ALL Genders</b>	<b>167</b>	<b>100.0%</b>	<b>162</b>	<b>100.0%</b>	<b>106</b>	<b>100.0%</b>	<b>106</b>	<b>100.0%</b>

# Santa Rosa Junior College - Program Unit Review

## Diesel Equipment Technology - FY 2017-18 (plus current FY Summer and Fall)

**5.7c Students Served - by Age** The number of students in each Discipline at first census broken down by age (duplicated headcount).

**ALL Locations** (Combined totals from ALL locations in the District)

Diesel/Equipment Technology	Age Range	2015-16	Percent	2016-17	Percent	2017-18	Percent	2018-19	Percent
	0 thru 18	48	28.7%	34	21.0%	18	17.0%	20	17.9%
	19 and 20	34	20.4%	49	30.2%	30	28.3%	30	28.3%
	21 thru 25	48	28.7%	42	25.9%	31	29.2%	31	29.2%
	26 thru 30	24	14.4%	22	13.6%	12	11.3%	12	11.3%
	31 thru 35	5	3.0%	8	4.9%	7	6.6%	7	6.6%
	36 thru 40	1	0.6%	2	1.2%	3	2.8%	3	2.8%
	41 thru 45	0	0.0%	1	0.6%	0	0.0%	0	0.0%
	46 thru 50	5	3.0%	3	1.9%	5	4.7%	5	4.7%
	51 thru 60	2	1.2%	1	0.6%	0	0.0%	0	0.0%
	61 plus	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	<b>ALL Ages</b>	<b>167</b>	<b>100.0%</b>	<b>162</b>	<b>100.0%</b>	<b>106</b>	<b>100.0%</b>	<b>106</b>	<b>100.0%</b>

## 5.8 Curriculum Offered Within Reasonable Time Frame

All diesel core classes are offered in a two semester cycle. A full time student can complete the required diesel certificate classes in the two semesters. Courses have been approved and converted to be offered as Hybrid online courses with the lab sessions offered at night. Due to the current economy daytime enrollment has dropped and nighttime classes have stayed full.

## 5.9a Curriculum Responsiveness

Students are surveyed each year for instructors performance. Advisory board reviews program changes and makes recommendations.

There are no general ed courses in diesel.

Many diesel classes are electives for the automotive and agriculture programs at the SRJC.

## 5.9b Alignment with High Schools (Tech-Prep ONLY)

Yes, we are deeply involved with local high schools and work extensively with the "Manager of School Initiatives and Career Pathway Development" and her department. We have been involved with 2+2 in past years, and now have developed a process that allows local high school auto instructors to administer the SRJC credit by exams for our Det 179/181 classes. This allows high school students to enter our SRJC diesel program with advanced standing.

## 5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

Not applicable

## 5.11a Labor Market Demand (Occupational Programs ONLY)

Sonoma county growth is a follows:	percentage of growth	Job Openings
Vehicle and mobile equipment mechanics	12.6%	73
Bus and truck mechanics and engine specialists	16.7%	9
farm mechanics	12.5%	3
Mobile heavy equipment mechanics	35.3%	9
Average overall growth for Diesel related occupations:	19.2%	
total number of ob openings:		94
Nearby counties with no Diesel equipment programs: (Totals for above jobs)		
Napa county	15.4%	27
Solano county	15.6%	53
State wide		
growth in the repair and mainteance field:	14.6	2,800

## **5.11b Academic Standards**

The Diesel program discusses academic standards at our department meetings. We have recently been dealing with content standards while reviewing course outlines to establish SLOs. Employers expect that our students meet some type of industry performance standard, and we discuss these standards with our advisory committee. Often we use the ability to pass national, independent, industry accepted skill level tests as a standard. We also use acceptable work skill demonstrations as a standard.

We are currently working on becoming NATEF (National Automotive Training Education Foundation) certified and are working with NC3 (National Coalition of Certification Centers) for diagnostic training certifications.

**6.1 Progress and Accomplishments Since Last Program/Unit Review**

Rank	Location	SP	M	Goal	Objective	Time Frame	Progress to Date
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**6.2b PRPP Editor Feedback - Optional**

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**6.3a Annual Unit Plan**

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
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