

University of Alaska Southeast  
POWER TECHNOLOGY  
DIESEL DEPARTMENT  
**2005-06 Annual Report on Assessment  
of Student Learning Outcomes**  
Chuck Craig      March, 2007

**MISSION STATEMENT  
DIESEL DEPARTMENT  
UNIVERSITY OF ALASKA SOUTHEAST**

The DIESEL department believes in providing specific job related skills, lifelong learning opportunities, and professional advancement for employment in various careers utilizing diesel engines and heavy equipment.

The DIESEL department is dedicated to providing quality learning opportunities by providing small class size, superior training aids, and quality instructors that have many years of experience in the heavy equipment profession.

The DIESEL department provides the tools, knowledge, and student internships that enable students to attain entry level employment and develop professionally.

The DIESEL department offers programs that are designed to meet the diverse needs of the students by offering occupational endorsements with either a marine, oiler, heavy duty emphasis, or Operating Engineers and special interest courses, and courses required in the UAS POWER TECHNOLOGY DEGREE.

**The following ten criteria will enable the department to complete the mission**

1. Develop, offer, and promote courses which train students for entry level positions in the workplace.
2. Provide courses that enable students to upgrade existing skills or retrain for changing job markets.

3. Offer courses that are required by the POWER TECHNOLOGY AS degree or are needed by other departments or disciplines for completion of a program.
4. Strive to provide the latest methods and technology in training aids and tooling to keep current with new products that are found in the workplace.
5. Use the expertise of local industry to maintain course relevancy by active participation of the diesel department advisory group.
6. Design and provide special courses or programs when needed by the local job market.
7. Develop and maintain excellent working relationships with the business community, high school, and establish partnerships with public and private corporations in the industry.
8. Provide and encourage internship experiences that develop the bridge between student and workplace.
9. Recruit and retain the best possible full time and adjunct faculty and provide professional development opportunities as needed to keep skills current.
10. Provide a student friendly and nurturing atmosphere in the classroom and lab.

**The UAS Diesel Department Assessment is divided into two categories:**

**(A) Individual COURSE assessment for DESL courses by using:**

1. Students course grades
2. Pre and Post course skill evaluations
3. Instructor observations
4. Students on-line evaluation of the course
5. State of Alaska DOT CDL exams
6. US / EPA Air conditioning and refer exams
7. USCG, MMD, QMED, written exams

**(B) SPECIFIC PROGRAM assessment**

# 1. See below

## AAS in Power Technology, With Diesel Emphasis

There are 2 goals in this AAS program. Only goal #1 will be assessed at this time.

**GOAL #1. Program graduates will have demonstrated a broad based proficiency in the skills required to obtain and succeed in an entry level position in the diesel industry or other closely related field.** *The UAS, UA, and Diesel department mission statements, the UAS 10 year strategic plan, and the UAS core values will be used to ensure student success.*

### OUTCOMES FOR GOAL #1

1.1. Graduating students will be able to safely perform the hands-on mechanical tasks needed to troubleshoot, repair, adjust, and service heavy duty diesel type equipment and related auxiliary systems.

1.2. Graduating students will have shown they can differentiate between systems and concepts found in various marine, vehicular, earth moving, and power house systems.

1.3 Students will have demonstrated the necessary mechanical skills, social skills, and work habits to successfully completed a 3<sup>rd</sup> semester internship in the private sector.

**GOAL #2. Program graduates will have demonstrated broad based proficiency in the six UAS competencies to the level needed to accomplish goal #1.** *The UAS, UA, and Diesel department mission statements, the UAS 10 year strategic plan, and the UAS core values will be used to ensure student success.*

## **OUTCOMES FOR GOAL #2**

2.1. Graduates will have demonstrated the, communication, social, ethical and moral skills and values needed to successfully function in multi-gender and multi-cultural work teams .

2.2. Graduates will have mastered the computational and critical thinking skills necessary to analyze, adjust, and trouble shoot complex systems in both metric and standard systems.

2.3. Graduates will have demonstrated they can successfully use the various information systems, reference materials, information hardware and software needed for operating, troubleshooting, and maintaining newer complex system.

### **WHAT WE ARE USING TO ASSESS:**

The criteria for determining to what extent the student has succeeded in meeting goal #1 will be determined by using the numerical values from the RUBRIC for Goal #1. Each level of performance has been given a number value: 1 is low 4 is high.

**The RUBRIC has the following areas that will be tracked for assessment:**

- 1. Student has a successful internship DESL 291 (usually 3<sup>rd</sup> semester). 180 clock hours.**
- 2. Student obtains employment in the DIESEL related field.**
- 3. Student is still working in the DIESEL field after 2 years.**

***RUBRIC for GOAL #1. AAS DIESEL: GOAL #1. Program graduates will have demonstrated a broad based proficiency in the skills required to obtain and succeed in an entry level position in the diesel industry or other closely related field.***

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>INTERNSHIP PERFORMANCE</b>	Student gets a poor evaluation for internship	Student gets a satisfactory evaluation	Student get a good evaluation	Student gets an excellent evaluation
<b>EMPLOYMENT</b>	Cannot obtain any employment in the DIESEL sector	Works part time in the DIESEL field	Works full time seasonal in the DIESEL field	Works all year long in the DIESEL field and has advanced.
<b>LONGEVITY</b>	Not employed in the DIESEL sector	Still working in DIESEL sector after 90 days	Still working in DIESEL sector after 1 year	Still working in DIESEL sector over 2 years

## **WHEN WE ARE GOING TO ASSESS:**

- (A) At the time the student completes their internship
- (B) At 12 months after graduation
- (C) At 2 years after graduation

## **PROGRAM ANTICIPATED RESULTS:**

For the INTERNSHIP measure we initially expect to have an average result of COMPETENT (3).

For the EMPLOYMENT results we initially expect to have an average result of DEVELOPING (2)

For the LONGEVITY results we initially expect to have an average result of DEVELOPING/ACCOMPLISHED (3.5)

**AVERAGE EXPECTED RESULTS= 2.8**

## USING THE RESULTS:

If the results are lower than the ANTICIPATED results, the Diesel Advisory Committee will be informed and a plan to correct the deficient area(s) will be implemented. This plan may result in a syllabus modification, course addition or course deletion

# Marine Engine Room Prep Occupational Endorsement (OE) (MERP)

There are 2 goals in this OE program. Only goal #1 will be assessed at this time. See below.

## **GOALS**

***GOAL #1. Program graduates will have demonstrated proficiency in the skills required to become a USCG Documented Oiler and obtain and succeed in an entry-level position in the marine transportation sector.***

## **OUTCOMES for GOAL 1:**

1.1 Graduates will have successfully spent 1440 hours internship on board a large vessel working in the engine room and also had the “Standards of Training, Certification, and Watch keeping” (STCW 95) signed off.

1.2 Graduates will have the broad based marine knowledge to pass the USCG written Oiler exam and receive their USCG Merchant Marine Document with an Oiler endorsement.

1.3 Graduates will have demonstrated they have the technical knowledge to successfully perform the required duties as a “Qualified Member of the Engineering Department” “QMED” in large marine vessels and find and continue employment.

***GOAL #2. Program graduates will have demonstrated proficiency in the six UAS competencies to the level needed to accomplish goal #1. The UAS, UA, and Diesel department mission statements, the UAS 10 year strategic plan, and the UAS core values will be used to ensure student success.***

## **OUTCOMES for GOAL 2:**

2.1. Graduates will have demonstrated the, communication, social, ethical and moral skills and values needed to successfully function in multi-gender and multi-cultural work teams found on large vessels .

2.2. Graduates will have mastered the computational and critical thinking skills necessary to analyze, adjust, and trouble shoot complex systems in both metric and standard systems.

2.3. Graduates will have demonstrated they can successfully use the various information systems, reference materials, information hardware and software needed for operating, troubleshooting, and maintaining newer complex marine system.

## WHAT WE ARE USING TO ASSESS:

The criteria for determining to what extent the student has succeeded in meeting goal #1 will be determined by using the numerical values from the RUBRIC for Goal #1. Each level of performance has been given a number value: 1 is low 4 is high.

The RUBRIC has the following areas that will be tracked for assessment:

1. Passing the USCG OILER exam
2. Initial employment after obtaining the oiler card
3. Ability to hold a marine oiler position , ( *longevity*).

**RUBRIC for GOAL #1. AAS OILER:** Program graduates will have Demonstrated proficiency in the skills required to become a USCG Documented Oiler and obtain and succeed in an entry-level position in the marine transportation sector.

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>PASSES OILER EXAM</b>	Does not pass the USCG oiler exam	Passes the USCG oiler exam on third try	Passes the USCG oiler exam on second try	Passes the USCG oiler exam on first try
<b>EMPLOYMENT</b>	Cannot obtain any employment in the marine industry	Works as relief oiler (part time) on a vessel	Works steady as an oiler but has no permanent position	Has obtained a permanent berth as oiler
<b>LONGEVITY</b>	Cannot find employment In the marine sector	Has been working for 90 days in marine sector	Still working after 1 year	Still working in the marine sector after 2 years

## **WHEN WE ARE GOING TO ASSESS:**

After the on board internship is completed.

At the time the student passes the oiler exam (or try more than 3 times).

At 2 years after the oiler exam was passed

## **PROGRAM ANTICIPATED RESULTS:**

- For the USCG exam results we initially expect to have an average result of COMPETENT (3).
- For the EMPLOYMENT results we initially expect to have an average result of DEVELOPING (2)
- For the LONGEVITY results we initially expect to have an average result of DEVELOPING/ACCOMPLISHED (3.5)

## **AVERAGE EXPECTED RESULTS= 2.8**

### **USING THE RESULTS:**

If the results are lower than the ANTICIPATED results, the Diesel Advisory Committee will be informed and a plan to correct the deficient area(s) will be implemented. This plan may result in a syllabus modification, course addition or course deletion.

# **ACTUAL SURVEY RESULTS**

## **For the AAS Degree, DIESEL EMPHASIS**

**Note: 4 OUT OF 5 (80%) AAS GRADUATES WERE ABLE TO BE CONTACTED AND INTERVIEWED TO GET THE BELOW RESULTS.**

**RESULTS FOR: ISSAC PARKER graduation date 2003 AAS DIESEL EMPHASIS**  
 Ph; 907 895 1032 Delta Junction

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>INTERNSHIP PERFORMANCE</b>	Student gets a poor evaluation for internship	Student gets a satisfactory evaluation	Student gets a good evaluation	Student gets an excellent evaluation Internship in house
<b>EMPLOYMENT</b>	Cannot obtain any employment in the DIESEL sector	Work part time in the DIESEL field	Work full time seasonal in the DIESEL field	Work all year long in the DIESEL field and has advanced.
<b>LONGEVITY</b>	Not employed in the DIESEL sector	Still working in DIESEL sector after 90 days	Still working in DIESEL sector after 1 year	Still working in DIESEL sector over 2 years

**ISSAC PARKER EMPLOYMENT RECORD:**

As soon as left UAS worked as diesel mechanic in Delta, then worked as a diesel mechanic in Antarctica with Raytheon for 2 years. Now back in Delta working as a diesel mechanic for a construction company full time.

**Issac's SCORE 4.00** Phone call 12/12/06

**RESULTS FOR: JAMES PARKIN**  
**2002 AAS DIESEL EMPHASIS**  
 ph 907 463 1530  
 contacted 12/13/06

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>INTERNSHIP PERFORMANCE</b>	Student gets a poor evaluation for internship	Student gets a satisfactory evaluation	Student gets a good evaluation	Student gets an excellent evaluation from Whalers Cove
<b>EMPLOYMENT</b>	Cannot obtain any employment in the DIESEL sector	Works part time in the DIESEL field	Works full time seasonal in the DIESEL field	Works all year long in the DIESEL field and has advanced.
<b>LONGEVITY</b>	Not employed in the DIESEL sector	Still working in DIESEL sector after 90 days	Still working in DIESEL sector after 1 year	Still worked in DIESEL sector over 2 years

JAMES PARKIN EMPLOYMENT: James as now taken a job with TSA for the benefits. He worked over 4 years as a diesel mechanic after graduation. **3.6 score for James.**

a

**RESULTS FOR: Ian MacIntosh AAS Diesel 2002**  
 Kodiak 907 487 2514 Contacted 3/20/07

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>INTERNSHIP PERFORMANCE</b>	Student gets a poor evaluation for internship	Student gets a satisfactory evaluation	Student gets a good evaluation	Student gets an excellent evaluation Verbal- B. Shatenberg Anchor Electric
<b>EMPLOYMENT</b>	Cannot obtain any employment in the DIESEL sector	Works part time in the DIESEL field, spends rest time fishing	Works full time seasonal in the DIESEL field	Works all year long in the DIESEL field and has advanced.
<b>LONGEVITY</b>	Not employed in the DIESEL sector	Still working in DIESEL sector after 90 days	Still working in DIESEL sector after 1 year	Still working in DIESEL sector over 2 years

EMPLOYMENT RESULTS FOR Ian MacIntosh:  
 Contacted student: He spends most of his time fishing and working on the fishing vessels he is the crew on. He is not employed as a mechanic but as fishing crew. **Ian's score 2.3**

**Results for Nathan Weber AAS Diesel 2006 ( was done except for 1 GER class in 2002  
Tofino BC 250 218 3926**

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>INTERNSHIP PERFORMANCE</b>	Student gets a poor evaluation for internship	Student gets a satisfactory evaluation	Student gets a good evaluation	Student gets an excellent evaluation Karl's Marine
<b>EMPLOYMENT</b>	Cannot obtain any employment in the DIESEL sector	Works part time in the DIESEL field	Works full time seasonal in the DIESEL field	Works all year long in the DIESEL field and has advanced.
<b>LONGEVITY</b>	Not employed in the DIESEL sector	Still working in DIESEL sector after 90 days	Still working in DIESEL sector after 1 year	Still working in DIESEL sector over 2 years

Employment Results for Nathan Weber:

- 5 years in the diesel field. Now working f/t in BC as marine mechanic.

**Nathan's score 4.0**

**AVERAGE SCORE FOR AAS DIESEL=3.47  
which is above expectation of 2.8**

**ACTUAL RESULTS for  
MERP OILER  
Occupational Endorsement**

**Note: A RANDOM SAMPLE OF 5 OUT OF ABOUT 12 OF THE MERP  
PROGRAM STUDENTS WERE SAMPLED IN THIS SURVEY.**

Results for WARD MACE Feb 13, 2006

780 4923 MERP OILER OE

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>PASSES USCG OILER EXAM</b>	Does not pass the USCG oiler exam	Passes the USCG oiler exam on third try	Passes the USCG oiler exam on second try	Ward Passes the USCG oiler exam on first try 3/3/06
<b>EMPLOYMENT</b>	Cannot obtain any employment in the marine sector	Works as relief oiler (part time) on a vessel	Works steady as an oiler but has no permanent position	Has obtained a permanent position as oiler
<b>LONGEVITY</b>	Not employed in marine sector	Still working in marine sector after 90 days	Still working in marine sector after 1 year	Still working in marine sector over 2 years

Content was OK for oiler preparation

**Ward Mace SCORE on 1/23/07=3.00**

Results for Joemilo Verdadero Feb 5, 2006/ feb 2006 MERP OILER OE

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>PASSES USCG OILER EXAM</b>	Does not pass the USCG oiler exam	Passes the USCG oiler exam on third try	Passes the USCG oiler exam on second try	Passes the USCG oiler exam on first try
<b>EMPLOYMENT</b>	Cannot obtain any employment in the marine sector	Works as relief oiler (part time) on a vessel	Works steady as an oiler but has no permanent position	Has obtained a permanent position as oiler on the Matauska
<b>LONGEVITY</b>	Not employed in marine sector	Still working in marine sector after 90 days	Still working in marine sector after 1 year	Still working in marine sector over 2 years

Content of program OK for oiler test

**Score for Joe 4.0** has passed his JR engineers test also

Results for Kim Wylie 2/22/06 / contacted on 2/12/07 Malispina/contacted on 2/12/07 Malispina/  
 perm as junior. MERP OILER OE

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>PASSES USCG OILER EXAM</b>	Does not pass the USCG oiler exam	Passes the USCG oiler exam on third try	Passes the USCG oiler exam on second try	Passes the USCG oiler exam on first try
<b>EMPLOYMENT</b>	Cannot obtain any employment in the marine sector	Works as relief oiler (part time) on a vessel	Works steady as an oiler but has no permanent position	Has obtained a permanent position as Junior Eng /Mal
<b>LONGEVITY</b>	Not employed in marine sector	Still working in marine sector after 90 days	Still working in marine sector after 1 year	Still working in marine sector over 2 years

**Kim's score 3.66 also passed Jr Engineers test**

**Results for  
CHRIS FENN: Contacted Feb 19, 2007 IS now 3<sup>rd</sup> engineer  
MERP OE**

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>PASSES USCG OILER EXAM</b>	Does not pass the USCG oiler exam	Passes the USCG oiler exam on third try	<b>Passes the USCG oiler exam on second try</b>	Passes the USCG oiler exam on first try
<b>EMPLOYMENT</b>	Cannot obtain any employment in the marine sector	Works as relief oiler (part time) on a vessel	<b>Works steady as an oiler but has no permanent position</b>	<b>Has obtained a permanent position as 3<sup>d</sup> engineer</b>
<b>LONGEVITY</b>	Not employed in marine sector	Still working in marine sector after 90 days	Still working in marine sector after 1 year	<b>Still working in marine sector over 2 years</b>

**CHRIS FENN'S SCORE 3.66, IS NOW A 3<sup>RD</sup> ENGINEER**

***HILL LEWIS, contacted Feb. 15,07***  
***MERP OE***

	<b>BEGINNING 1</b>	<b>DEVELOPING 2</b>	<b>COMPETENT 3</b>	<b>ACCOMPLISHED 4</b>
<b>PASSES USCG OILER EXAM</b>	Does not pass the USCG oiler exam	Passes the USCG oiler exam on third try	Passes the USCG oiler exam on second try	<b>Passes the USCG oiler exam on first try</b>
<b>EMPLOYM ENT</b>	Cannot obtain any employment in the marine industry	Works as relief oiler (part time) on a vessel	<b>Works steady as an oiler but has no permanent position</b>	Has obtained a permanent berth as oiler
<b>LONGEVIT Y</b>	Cannot find employment in the marine sector	Has been working for 90 days	Still working after 1 year	<b>Still working in the marine sector after 2 years</b>

Hill Lewis score 3.6

## **Program Changes** **Based on Assessment Results**

AAS DIESEL RESULTS =3.47  
EXPECTATIONS =2.8

NO CONTENT CHANGE NEEDED FOR THE AAS  
DIESEL

MERP OE RESULTS= 3.58  
EXPECTATIONS=2.8

NO CONTENT CHANGE NEEDED FOR THE MERP  
OE

Results of the assessment will be presented to the DIESEL  
Advisory Council on May 9, 2007.

## **Program Overview 2006-07**

- **The Diesel Department currently offers 2 AAS degrees and 3 Occupational Endorsements.**
- **There are industry partnerships with the Alaska Marine Highway system, Inland Boatmans Union of the Pacific, and the International Union of Operating Engineers Local 302.**
- **There are 2 full time (tenured or tenure) track instructors.**
- **There are plans already created to expand the physical size of the program about 50% as soon as funds are available.**

**More information is available at [uas.alaska.edu/diesel](http://uas.alaska.edu/diesel)**

## Advisory Committee Membership and Meeting Dates

Names of current advisory board members

### DIESEL ADVISORY COMMITTEE

Next Meeting: WEDNESDAY May 9<sup>th</sup> 7:00-8:30 pm TEC Room 212

### Changes needed for 2007

#### NAME

#### SECTOR

**1. Should CHANGE to Danny Lakop /**

State/ Job Service

*BEAU KELLY- Job Service( promoted)*  
Beau\_kelly@labor.state.ak.us  
Ak. Division Of Vocational Rehabilitation

**10002 Glacier Highway #101**

Juneau, Ak.99801  
VOC REHAB

**FAX 465-6857**

PH 465-8932

Status:

**2. Should REPLACE/ now is in sales**

H. E. Dealer

old ERIK CLARK –PSSR  
new Stan Roemmich  
N C MACHINERY CO

**8550 Airport Blvd**

Juneau, Ak 99801  
FAX 789 0180

PH 789-0181

**Status:**

**3. Retired , CHANGE to Rob Peterson who**

Union 302

**is new business agent**

**TERRY MILLER IUOE – business agent**

tmiller@local302.com

***IUOE***

PH 586 3850

FAX 463 5464

**Status:**

**4. KEEP ON**

CBJ

JEFF BROWN- maintenance mgr

**Jeff\_brown@ci.juneau.ak.us**

Eaglecrest Ski Area Maintenance Dept.

155 South Seward St.

Juneau , Ak 99801

586-0247

**Status:**

**5. REPLACE, now has new job unrelated**

H. E. Fleet

**Change to Tyler Rental ? who?**

**EARL HUDSON**

**e.hudson@cmiak.com**

CMI

780-4030

**Status:**

**6. KEEP ON**

H. E. Dealer

Chris Gerondale

**Chris.gerondale@cmiak.com**

CMI regional manager

780 3040

cell 3214403

2275 Brandy Lane

Juneau 99801

**Status:**

**7. ADD: AMY WILSON, AMHS training coordinator (KET)**  
**Or Paul Johnson, Chief AMHS** AMHS / state / **Marine Large**  
 Status:

**8. ADD: Mining Industry** Mining  
 Status: COEUR/GCMC

**9. REPLACE: Diesel Program Student** Diesel Student  
**Last Student graduated**  
**Who?**  
 Status:

**10. ADD, 4 season marine or** Marine Commercial  
**Allen Marine?**  
**Who?**  
 Status:

**11. ADD-Darrel Tesu:** Union -IBU  
**Bulsiness Agent International Boatmans**  
**Union of the Pacific**  
 Status:

**12. ADD -Mike Bell- Co chair** Vice -Chair

**13. KEEP- Chuck Craig-Chair** Chair

**INDIVIDUAL PROGRAM NUMBERS**

Juneau Campus - DESL	0	1	2	3	4	5	6	7
Academic Year								
# of Courses offered	13	14	17	17	17	16	17	13
Total SCH	359	397	426	445	484	499	370	334

**UAS AAS Power Technology Graduates Fiscal Years 2001- 2006**

Fiscal Year	Last Name	First Name	Mi	Street	City	State	Zip
2001							
2002	<b>Parkin V</b>	James	W	100 Kootznahoo Rd	Angoon	AK	99820
2002	<b>MacIntosh</b>	Ian	Richard	910 Steller Way	Kodiak	AK	99615
2003	<b>Parker</b>	Isaac	J	PO Box 1035	Delta Jct.	AK	99737
2005							
2005	Monnin Jr	John	Michael	PO Box 776	Barrow	AK	99723
2006							
2006							
2006	<b>Weber</b>	Nathan	R	PO Box 20713	Juneau	AK	99802

**NOTE: Curriculum MAPS available upon request.**

# CURRICULUM MAP AAS DIESEL

4/29/05 CHUCK CRAIG  
Page 1

I= Introduce D=Develop  
M=Mastery

- SPC 235 small group communication
- SPC 111 fund. of oral communication
- ENGL 212 Technical report writing
- ENGL 211 Intermediate composition
- ENGL 111 methods of written com.
- DESL 291 hd internship
- DESL 263 marine transmissions
- DESL 262 marine auxiliary systems
- DESI 261 marine auxiliary systems  
lab
- DESL 260 hd power trains
- DESL 255 hd suspension & align
- DESL 250 hd brakes & CDL prep
- DESI 105 fuel systems
- DESL 180 AC power generation
- DESL 171 hd electrical systems
- DESL 161 marine hydraulics
- DESL 130 refrigeration and air
- DESL 125 basic hydraulics
- DESL 110 diesel engines

**GOAL #1. Program graduates will have demonstrated a broad based proficiency in the skills required to obtain and succeed in an entry level position in the diesel industry or other closely related field. The UAS, UA, and Diesel department mission statements, the UAS 10 year strategic plan, and the UAS core values will be used to ensure student success.**

## OUTCOMES for GOAL 1:

1.1. Graduating students will be able to safely perform the hands-on mechanical tasks needed to troubleshoot, repair, adjust, and service heavy duty diesel type equipment and related auxiliary systems.

ID ID ID ID ID ID I ID ID ID ID ID ID ID ID ID  
M M D M

1.2. Graduating students will have shown they can differentiate between systems and concepts found in various marine, vehicular, earth moving, and power house systems.

IDM ID ID ID ID ID I ID ID ID ID ID ID ID ID ID  
D M

1.3 Students will have demonstrated the necessary mechanical skills, social skills, and work habits to successfully completed a 3rd semester internship in the private sector.

ID ID ID ID ID ID I ID ID ID ID ID ID ID ID ID  
D D

# CURRICULUM MAP AAS DIESEL CHUCK CRAIG Page 2

I= Introduce D=Develop  
M=Mastery

- SPC 235 small group communication
- SPC 111 fund. of oral communication
- ENGL 212 Technical report writing
- ENGL 211 Intermediate composition
- ENGL 111 methods of written com.
- DESL 291 hd Internship
- DESL 263 marine transmissions
- DESL 262 marine auxiliary systems
- DESL 261 marine auxiliary systems
- DESL 260 hd power trains
- DESL 255 hd suspension & align
- DESL 250 hd brakes & CDL prep
- DESL 105 final systems
- DESL 180 AC power generation
- DESL 171 hd electrical systems
- DESL 161 marine hydraulics
- DESL 130 refrigeration and air
- DESL 125 basic hydraulics
- DESL 110 diesel engines

**GOAL #2. Program graduates will have demonstrated broad based proficiency in the six UAS competencies to the level needed to accomplish goal #1. The UAS, UA, and Diesel department mission statements, the UAS 10 year strategic plan, and the UAS core values will be used to ensure student success.**

## OUTCOMES for GOAL 2:

- 2.1. Graduates will have demonstrated the, communication, social, ethical and moral skills and values needed to successfully function in multi-gender and multi-cultural work teams .
- 2.2. Graduates will have mastered the computational and critical thinking skills necessary to analyze, adjust, and trouble shoot complex systems in both metric and standard systems.
- 2.3. Graduates will have demonstrated they can successfully use the various information systems, reference materials, information hardware and software needed for operating, troubleshooting, and maintaining newer complex system.

