



MARKING CRITERIA AND STUDENT FEEDBACK

MODULE: Major Project

ASSIGNMENT: Dissertation Report

STUDENT:

DATE:

This section details the assessment criteria. The scores to which these are denominated by you determine your mark. The marks available for each criterion are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Common Assessment Criteria Applied	Mark available	Mark awarded	%
1. Research-Informed Literature (Extent of research evidence was reading, selection of credible sources to support the aims of the project) Extent of research evidence was reading, selection of credible sources to support the aims of the project			
YOU HAVE DEMONSTRATED A VERY EXTENSIVE AND INFORMED USE OF ACADEMIC RESEARCH	10	0	90
2. Knowledge and Understanding of Subject (Extent of knowledge within, and technical direction of the project) Extent of knowledge and understanding of concepts and underlying principles associated with the discipline			
YOU HAVE ABSORBED YOURSELF IN THIS SUBJECT TO DEVELOP A REAL DEPTH OF UNDERSTANDING	10	0	85
3. Analysis (Technical ability, analytical content and ability) Technical, evaluation and synthesis, logic, argument and judgement, analytical reflection, recognition of data and evidence			
EVERY ASPECT OF YOUR STUDY DEMONSTRATES EXTENSIVE ANALYSIS & EVALUATION WITH ACADEMIC SOURCES		0	90
4. Practical Application and Deployment (Progression/achievement, ability to draw conclusions, and understand results) Deployment of methods, materials, tools and techniques, application of concepts, foundation of experience and creative solutions to solve problems			
YOU HAVE CARRIED OUT A HUGE AMOUNT OF TECHNICAL, ANALYTICAL, EXPERIMENTAL & SIMULATION WORK.	35	0	95
5. Skills In Professional Practice (Quality of presentation and success in communicating the aims and scope of the project) Adherence to professional practice, intellectual and collaborative working, deployment of appropriate tools, presentation and organisation			
THIS IS VERY WELL WRITTEN. IT IS ACADEMICALLY VERY WELL STRUCTURED AND A CREDIT TO YOU.	10	0	77,5
Assignment Mark (Assignment marks are subject to certification at the Exam Board. These comments and marks are to give feedback on module work and up the pipeline only until they are certified.)			
Late Submission Penalties (if applicable) (1) No late work late (2) No late work late			

HOWEVER, WORD COUNT IS HIGH.

General comments

- Hand altered/corrections are not acceptable at this level

- Proof read and spell check your report before you hand it

- No Introduction.

- No Conclusion.

- Make it clear which task you are talking about throughout

- Whilst I can understand what you are trying to say, some

- Make sure that you discuss the relevant information in the

- Do not use colloquial language

P16. EON. 5

REPLACE Q BY $T_{WALLINT}$.

P19. LINER & EXHAUST VALVE TEMPS ARE PARTICULARLY HIGH (INSTANTANEOUS).

P20. FIG 4.12. LINER AV. TEMP. IS CLEARLY TOO HIGH & PISTON TOO LOW.

P24. IN FIG. 4.16, HEAT LOSS RATE SEEMS PARTICULARLY LOW. (DOES IT AGREE WITH AUTHOR'S 9-16%?)

P26. EON 19 NEEDS RUN & NOT R_i (TYPING)

P30. FIG 4.20 CHANGE GIBBS ENERGY TO GIBBS ENERGY OF FORMATION.

P34. FIG. 4.26 WHY DOES C_p GO DOWN ABOVE 3200 K?

P36. YOU INTRODUCE $n(g)$ & $n(s)$ WITHOUT EXPLANATION UNTIL P39.

P40. HEAT TRANSFER MULTIPLIES INCREASE HEAT TRANSFER IN COMPRESSION AT LOW RPM BUT DROPS IT IN EXPANSION AT LOW RPM.

P41. $n(s)$ IS MORE SIMPLY AN ABSTRACT I BELIEVE.

P42. IT IS UNCONVINCING $n(s) \propto dn(g)$

P43. FIG 4.34 ~ NEEDS CLEARER EXPLANATION.

P54. FIG 5.11. EXPAN 0.1 BAR MORE CLEARLY

→ P81. VERY GOOD CONVERGE SIMULATIONS & ANALYSIS.

CONCLUSION: I'M GLAD YOU STATE INTERNAL TEMPS ARE UNREALISTIC.

I'M NOT SURE IN ADVICE TO USE EXPANSION POLYTROPIC INDEX AS $n(s)$ AS YOU CALCULATED IS STILL INTRIGUING ME, ALTHOUGH IT CAN BE VALID APPROACH.

KACPAE (CONT.)

APPENDIX

P.90. FIG 9.1 NOW CORRECTED

HEAT TRANSFER RATES FOLLOW COMMON SENSE. LOW RPM'S ARE WORST.

P 91. F. 9.2. SAME IS TRUE FOR CYLINDER HEAD

F 9.3 AND PISTON

F 9.5 TOTAL NOW CORRECTED

HEAT TRANSFER RATE AGAIN WORST AT LOW RPM.

~ ALL AGREEING WITH COMMON SENSE.

P 97. F 9.14 CORRECTED HEAT TRANSFER IS NOW BEST AT LOW RPM. MAYBE THIS DOES NOT FOLLOW COMMON SENSE AS USE OF YOUR

HEAT TRANSFER MULTIPLIER IN EXPANSION WHICH IS LESS THAN 1.

FIG 9.15 ~ SAME COMMENTS

P 98. FIG 9.17. SHOWS TOTAL HEAT TRANSFER RATE BEST AT LOW RPM.

↓ THE CORRECTED VALUES DO NOT CONFORM TO COMMON SENSE AT LOW RPM.

P 107. FIG 9.33 1500/2000 RPM HAVE HIGHEST BURNED TEMPS WHICH MAY NOT BE TRUE AS LEANEST MIXTURES / MOST TIME FOR THESE LEAD TO LOWEST γ HEAT LOSS. FIG 9.37.

MODULE Major Project
STUDENT

ASSIGNMENT Viva (Questions & Poster)

DATE:

This section details the assessment criteria. The extent to which these are demonstrated by you determines your mark. The marks available for each criterion are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Course Assessment Criteria Applied		Score possible	Score earned
1. Understanding and Analytic Defence of work through technical questioning			
You continue to show both technical depth. Ultimately more data & time is needed for this study to fully understand.		90	0
2. Transferable Skills for Life and Professional Practice (Summary Focus)			
Interesting poster reflecting part of project		10	0
Assignment Mark (assessment results are subject to verification at the Exam Board. These comments and results are to give feedback on student work and are for guidance only, until they are confirmed.)			
Less Distinction Possible (tick if appropriate)			
1-2 to next level		0	N
3-4 to next level			

Q1. Very/ comprehensive
Textbook Answer.

Q2. Sir, I can understand
that now.

Q3. I understand & appreciate your comments but an accurate host transfer model would give a reader more confidence in overall simulation.

Q4. I ALSO BELIEVE IN-CYLINDER
VFA IS MOST APPROPRIATE.
IT WOULD BE INTERESTING
TO PURSUE A STUDY OF
BURNED TEMPERATURES.

Q5. Interesting Your TDC

General comments

- Hand altered corrections are not acceptable at all

• Proof read and spell check your report before you submit it.

- No Introduction

- No Conclusion

- Make it clear which task you are talking about

- Whilst I can understand what you are trying to

- Make sure that you discuss the relevant information

- Do not use colloquial language

- Consider the amount of effort that you put into

- Make sure that you discuss the correct topics in
- Consider the amount of time for each

- Don't make bold economic statements without...

- Personal commentary about how you write the

- Overly simplistic language is used in places

• Some of your statements are misleading or inaccurate.

- Whilst I can understand what you are trying to

- If you are going to use mixed features such as:

- Watch your word count. You need to be concise.

• Any statements that were made must be accurate.

Any statements that you make must be explained

• Any figures that you insert from the internet now

• You are going to use figures that rely on colors

black and white.

- Any figures must be relevant and add information

• Figures and illustrations would have added info

- Consider using diagrams to help explain what