

## Cal Poly MSc Aerospace Engineering – Thesis Defense Feedback Form

The following criteria should be used by all committee members to evaluate the thesis defense of Masters students in the Aerospace Engineering department at Cal Poly. After the defense has been completed, please return this form directly to the thesis advisor (not to the student).

Defense Content (~75%)													
Introduction and Background (literature review): Is it clear where this work lies in the context of the field in general including external works?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>0</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>1</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>2</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>3</b></td> <td style="width: 16.6%; background-color: #fff2cc; text-align: center;"><b>4</b></td> <td style="width: 16.6%; background-color: #c6e0b4; text-align: center;"><b>5</b></td> </tr> <tr> <td style="text-align: center;">Not included</td> <td style="text-align: center;">Needs significant improvement</td> <td style="text-align: center;">Needs improvement</td> <td style="text-align: center;">Good or developing</td> <td style="text-align: center;">Very good</td> <td style="text-align: center;">Excellent</td> </tr> </table>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Project Definition: What is the reason for this work and is it relevant to development of the field in general? Is it clear what the scope and motivation are?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>0</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>1</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>2</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>3</b></td> <td style="width: 16.6%; background-color: #fff2cc; text-align: center;"><b>4</b></td> <td style="width: 16.6%; background-color: #c6e0b4; text-align: center;"><b>5</b></td> </tr> <tr> <td style="text-align: center;">Not included</td> <td style="text-align: center;">Needs significant improvement</td> <td style="text-align: center;">Needs improvement</td> <td style="text-align: center;">Good or developing</td> <td style="text-align: center;">Very good</td> <td style="text-align: center;">Excellent</td> </tr> </table>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Methodology: Are the methods employed relevant and correctly implemented? Are there any technical errors of problems?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>0</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>1</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>2</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>3</b></td> <td style="width: 16.6%; background-color: #fff2cc; text-align: center;"><b>4</b></td> <td style="width: 16.6%; background-color: #c6e0b4; text-align: center;"><b>5</b></td> </tr> <tr> <td style="text-align: center;">Not included</td> <td style="text-align: center;">Needs significant improvement</td> <td style="text-align: center;">Needs improvement</td> <td style="text-align: center;">Good or developing</td> <td style="text-align: center;">Very good</td> <td style="text-align: center;">Excellent</td> </tr> </table>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Validation: How were results validated? Is the validation relevant and provide confidence?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>0</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>1</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>2</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>3</b></td> <td style="width: 16.6%; background-color: #fff2cc; text-align: center;"><b>4</b></td> <td style="width: 16.6%; background-color: #c6e0b4; text-align: center;"><b>5</b></td> </tr> <tr> <td style="text-align: center;">Not included</td> <td style="text-align: center;">Needs significant improvement</td> <td style="text-align: center;">Needs improvement</td> <td style="text-align: center;">Good or developing</td> <td style="text-align: center;">Very good</td> <td style="text-align: center;">Excellent</td> </tr> </table>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Results Presentation: Are results clearly presented and discussed, are they relevant to the project scope, are they conclusive?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>0</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>1</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>2</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>3</b></td> <td style="width: 16.6%; background-color: #fff2cc; text-align: center;"><b>4</b></td> <td style="width: 16.6%; background-color: #c6e0b4; text-align: center;"><b>5</b></td> </tr> <tr> <td style="text-align: center;">Not included</td> <td style="text-align: center;">Needs significant improvement</td> <td style="text-align: center;">Needs improvement</td> <td style="text-align: center;">Good or developing</td> <td style="text-align: center;">Very good</td> <td style="text-align: center;">Excellent</td> </tr> </table>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Analysis: Are minimum confidence criteria for proof clearly defined and met?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>0</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>1</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>2</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>3</b></td> <td style="width: 16.6%; background-color: #fff2cc; text-align: center;"><b>4</b></td> <td style="width: 16.6%; background-color: #c6e0b4; text-align: center;"><b>5</b></td> </tr> <tr> <td style="text-align: center;">Not included</td> <td style="text-align: center;">Needs significant improvement</td> <td style="text-align: center;">Needs improvement</td> <td style="text-align: center;">Good or developing</td> <td style="text-align: center;">Very good</td> <td style="text-align: center;">Excellent</td> </tr> </table>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Conclusions: The summary of the project clearly addresses the motivation, scope and project statement and provides conclusive results that support the outcomes of the thesis work.	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>0</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>1</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>2</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>3</b></td> <td style="width: 16.6%; background-color: #fff2cc; text-align: center;"><b>4</b></td> <td style="width: 16.6%; background-color: #c6e0b4; text-align: center;"><b>5</b></td> </tr> <tr> <td style="text-align: center;">Not included</td> <td style="text-align: center;">Needs significant improvement</td> <td style="text-align: center;">Needs improvement</td> <td style="text-align: center;">Good or developing</td> <td style="text-align: center;">Very good</td> <td style="text-align: center;">Excellent</td> </tr> </table>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Future Work: Has the student identified potential areas of improvement to their work, and potential future directions to continue the work forwards.	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>0</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>1</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>2</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>3</b></td> <td style="width: 16.6%; background-color: #fff2cc; text-align: center;"><b>4</b></td> <td style="width: 16.6%; background-color: #c6e0b4; text-align: center;"><b>5</b></td> </tr> <tr> <td style="text-align: center;">Not included</td> <td style="text-align: center;">Needs significant improvement</td> <td style="text-align: center;">Needs improvement</td> <td style="text-align: center;">Good or developing</td> <td style="text-align: center;">Very good</td> <td style="text-align: center;">Excellent</td> </tr> </table>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Level of Technical Detail: Does the student demonstrate a deep understanding of their topic and associated theory?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>0</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>1</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>2</b></td> <td style="width: 16.6%; background-color: #f4a460; text-align: center;"><b>3</b></td> <td style="width: 16.6%; background-color: #fff2cc; text-align: center;"><b>4</b></td> <td style="width: 16.6%; background-color: #c6e0b4; text-align: center;"><b>5</b></td> </tr> <tr> <td style="text-align: center;">Not included</td> <td style="text-align: center;">Needs significant improvement</td> <td style="text-align: center;">Needs improvement</td> <td style="text-align: center;">Good or developing</td> <td style="text-align: center;">Very good</td> <td style="text-align: center;">Excellent</td> </tr> </table>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Defense Professionalism (~25%)													
Professionalism: Did the student display a professional air, having clearly prepared, and speak clearly with appropriate body language and verbal language	<table border="1"> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Not included</td> <td>Needs significant improvement</td> <td>Needs improvement</td> <td>Good or developing</td> <td>Very good</td> <td>Excellent</td> </tr> </table>	0	1	2	3	4	5	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Slide formatting (layout, readability, consistency, information, etc)	<table border="1"> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Not included</td> <td>Needs significant improvement</td> <td>Needs improvement</td> <td>Good or developing</td> <td>Very good</td> <td>Excellent</td> </tr> </table>	0	1	2	3	4	5	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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Responding: Did the student respond well to comments and questions from committee members.	<table border="1"> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Not included</td> <td>Needs significant improvement</td> <td>Needs improvement</td> <td>Good or developing</td> <td>Very good</td> <td>Excellent</td> </tr> </table>	0	1	2	3	4	5	Not included	Needs significant improvement	Needs improvement	Good or developing	Very good	Excellent
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General Feedback and Comments													

Converting to a letter grade – guidelines for thesis advisor and students

$$Score = \frac{Sum\ of\ awarded\ scores}{60}$$

Department recommended: A = >88%, A- = >85%, B+ = >82%, B = >75%, below 75%, set-up an 'incomplete' contract with the student