**ZEIT4500 ENGINEERING PROJECT ASSESSMENT GUIDANCE**

*The following describe the expectations of performance in the final year project to achieve each of the grading levels. It is anticipated that students will satisfy different criteria at different levels. Assessment will take this into account when determining the final grade.*

*• It would be very rare for a student to gain a mark in excess of 90%, as this would be the work exhibited by a student of University Medal calibre.*

*• It may be the case that the project itself limits the attainment of high grades, no matter how much effort and insight the student may place. The scope of the project is to be negotiated, and defined by the Panel for the student at the outset.*

*• While intensive effort by the student will reap rewards and satisfaction, it is not the case that this alone results in 100%. The grading, as illustrated below, shows the academic merits and thoroughness that must be exhibited in order to attain a mark in the respective grade range.*

**HIGH DISTINCTION: An outstanding performance; mark range 85 - 100**

The student has applied themselves extremely diligently to the problem. They have consulted extensively with the appropriate literature (journal papers, reports, standards, design documents etc) and very clearly identified the need for the project. They have constructed an excellent set of clear aims and, having considered various options, an appropriate methodology to carry out the project. They have very carefully planned the conduct of the project and closely managed this plan throughout its course. They have very carefully collected appropriate data of high quality either from physical or numerical experiments or from designs. They have very carefully reduced the data into a usable form. They have very carefully analysed the data or design using the appropriate engineering tools and methodologies and *thoroughly* assessed the levels of accuracy involved. They have used their own knowledge and that from the literature to intelligently interpret the results. They have drawn numerous insightful conclusions from the data analysis to clearly address the original aims, or employed novel methods in design. They have provided a comprehensive set of documentation with thoughtful recommendations for future extension of the work. They have very carefully and clearly presented their work in written form at a level that is equivalent to a publishable journal paper, or their design is functional within industry. They have demonstrated a very high degree of self-direction for *all* aspects of the project. ***An outstanding piece of work.***

**DISTINCTION: A superior performance; mark range 75 - 84**

The student has applied themselves very diligently to the problem. They have consulted widely with the appropriate literature (journal papers, reports, standards, designs, etc.) and clearly identified the need for the project. They have constructed a clear set of aims and, having considered various options, an appropriate methodology to carry out the project. They have carefully planned the conduct of the project and managed this plan throughout its course. They have carefully collected appropriate data of good quality either from physical or numerical experiments or from designs. They have carefully reduced the data into a usable form. They have carefully analysed the data or design using the *appropriate* engineering tools and methodologies and assessed the levels of accuracy involved. They have drawn some insightful conclusions from the data analysis and/or design to clearly address the original aims. They have provided some thoughtful recommendations for future extension of the work. They have carefully and clearly presented their work in written form at a level that is equivalent to a publishable conference paper or their design will be made integral in an industrial setting. Their documentation is easily followed and work repeatable without extra effort. They have demonstrated a *good* degree of selfdirection for many aspects of the project. ***A very good piece of work.***

**CREDIT: A good performance; mark range 65 - 74**

The student has applied themselves quite diligently to the problem. They have consulted with the literature (journal papers, reports, standards, designs, etc.) and identified a need for the project. They have constructed some clear aims and, having considered various options, a reasonable methodology to carry out the project. They have planned the conduct of the project and managed this plan throughout its course. They have collected appropriate data of good quality either from physical or numerical experiments or from designs. They have reduced the data into a usable form. They have analysed the data or design using *some* appropriate engineering tools and methodologies and made some attempt to assess the levels of accuracy involved. They have drawn some useful conclusions from the data analysis and/or design to clearly address the original aims. They have provided some useful recommendations for future extension of the work. They have presented their work in written form at a *reasonably good* level though it may contain a number of errors. Their documentation would allow repetition of experiments and/or use of designs without significant further investigation. They have demonstrated a *reasonable* degree of self-direction for aspects of the project but some assistance has been required to complete routine tasks. ***A good piece of work, showing a sound and thorough grasp of the subject matter, though possibly lacking in the breadth and depth required for a first-class mark.***

**PASS: An acceptable level of performance; mark range 50 - 64**

The student has applied themselves satisfactorily to the problem. They have consulted the literature (journal papers, reports, standards, designs etc) in only a cursory or directed manner to identify the need for the project. They have constructed a satisfactory set of aims and, having considered various options, a methodology to carry out the project. They have made a reasonable attempt to plan the conduct of the project and made some limited attempt to manage this plan throughout its course. They have collected limited data either from physical or numerical experiments or from designs. They have made some attempt to reduce the data into a usable form. They have made some attempt to analyse the data or design but may not have attempted to assess its accuracy. They have drawn one or two acceptable conclusions from the data analysis in an attempt to address the original aims. They have made only a very limited attempt to recommend future extensions of the work. The future extensions are material that could have been covered in this scope. They have only presented their work satisfactorily in written form and it likely contains numerous errors. They have demonstrated little or no self-direction. Constant assistance has been required to complete routine tasks. ***A satisfactory piece of work but one that is missing many of the required components of good research, design, and analysis or those that are present are not of a high quality.***

**FAIL: Unsatisfactory performance; mark range 40 - 49**

The student has *not applied* themselves in a satisfactory manner to the project and has not demonstrated an ability to manage or conduct an engineering project or deliver a useful set of results or conclusions. They have not demonstrated sufficient skills and learning from earlier or concurrent courses. There is little or no original work. ***They have not satisfied the requirements for a pass grade.***

**FAIL: A very poor performance; mark range < 40**

A very *bad* piece of work, showing that the author has failed to engage seriously with any of the subject-matter involved, and/or demonstrates totalconfusion over the requirements of the work set. ***There is little or no original work***. It is very unlikely that work of a passing standard would be producedeven if the author were given the opportunity to repeat the work.

*Partially based on: Course Outline, MGMT1104 Managing Across Cultures, Faculty of Commerce and Economics, School of Organisation and*

*Management. UNSW Session 2, 2004, and Assessment Guidelines for ZEIT4500, A. Neely, 2010.*