The Department of Mechanical Engineering has introduced the concept of Rubric in the following areas. The students are provided with the related rubric before doing project works, writing reports for project/practical training/GP so that they can follow the guidelines. All evaluations are based on the guidelines given in the rubrics.

1. Rubric for B E Project [both for 7th and 8th Semester]
2. Rubric for Practical Training
3. Rubric for General Proficiency [Report & Presentation]
4. Rubric for General Proficiency [Group Discussion]
5. Rubric for Selection of Best B E Project
6. Rubric for Industrial Visit
7. Rubric for Assignment/Viva

The details of the rubrics are given hereunder.

1. Rubrics for B E Project (both for 7th and 8th Semester)

Rubrics for Phase I

Project Phase I: Project work determination	**Students have to defend/prove**				
	Engineering Knowledge	**Novelty of idea**	**Social/ Engineering impact**	**Communication skill**	
(1)Project proposal (in short to reflect tentative title of project)					
(2) Problem statement(in details of text/ graphics/ flow chart: Maximum one page)					
(3) Detail work plan (% allocation for Phase II and Phase III)					
Judgement Criteria for Panellists	**Excellent (90≥mark≤100)**	**Very Good (80 ≥mark≤90)**	**Good (70≥ mark≤80)**	**Average (60≥ mark≤70)**	**Fair (40≥ mark≤60)**

Rubrics for Phase II

Criteria	Marks given by Panel				
	Excellent (90≥mark≤100)	**Very good (80 ≥mark≤90)**	**Good (70≥ mark≤80)**	**Average (60≥ mark≤70)**	**Fair (40≥ mark≤60)**
(1) Test work done against work promised					
(2) Communication skill of individual student					

Rubrics for Phase III

Scale of Assessment

Excellent (90≥mark≤100)	Very good (80 ≥mark≤90)	Good (70≥ mark≤80)	Average (60≥ mark≤70)	Fair (40≥ mark≤60)

Criteria									
Work plan completed from promised	Appropriateness of final title	Quality of literature Collected	Theoretical deduction if any, If not available, theoretical engineering basis available?	Experimental plan/ Methodology used (Is it systematic & scientific?)	Summary of findings (Statements available?)	Societal value	Environmental impact	Future scope	Report completeness

To be collected from students

Sample of Work plan (students' promise to do work)	**Phase**
(1) Literature survey	**Phase II**
(2) Theoretical work	
(3) Material collection	
(4) Fabrication work	**Phase III**
(5) Testing of model and data collection	
(6) Data analysis	
(7) Presentation of results	
(8) Summary/ conclusions on findings	

For Supervisor

Criteria	**Participation in team**	**Novelty in idea suggestion**	**Punctuality and Discipline**
(1) Preparation of title/ objective/ problem statement			
(2) Literature survey			
(3) Theoretical analysis/ Practical work/ computation work			
(4) Data analysis/ Presentation			
(5) Report writing/ formatting			

2. Rubric for Practical Training

Practical Training Marking guidelines [Total Marks=50]					
Criteria [total marks allotted]	**(0-25%)**	**(25-50%)**	**(50-75%)**	**(75-100%)**	**Total**
Report quality ** [writing format **refer to Annx.1(b)**] [15]	Average	Good	Very good	Excellent	
	Indicate one grade (from average to excellent)				
Domain knowledge tested in viva** [15]	Average	Good	Very good	Excellent	
	Indicate one grade (from average to excellent)				
Knowledge of Technical & Behavioural Standards [10]	Average	Good	Very good	Excellent	
	Indicate one grade (from average to excellent)				
Communication Skill** [10]	Average	Good	Very good	Excellent	
	Indicate one grade (from average to excellent)				

3. Rubric for General Proficiency [Report & Presentation]

General Proficiency [Report & Presentation] Marking guidelines [Total Marks=50]							
Criteria [Maximum marks allotted]		**(0-20%)**	**(20-40%)**	**(40-60%)**	**(60-80%)**	**(80-100%)**	**Total**
Topic of study relevance with * [10]	a. Technical b. Social c. Environmental	Contains "anyone"	Contains "any two"	Contains "any three"	Contains "any four"	Contains "all five"	
	d. Ethical e. Creative and non conventional idea	Indicate relevance found from (a, b, c, d, e):					
Literature survey/Field study * [evaluate if sources have done quality work] [10]		Fair	Average	Good	V. Good	Excellent	
		Indicate one grade (from fair to excellent)					
Ethical report preparation* [10]		(a) Already published work copied	(b) Published work taken as reference and modified the work by own idea	(c) Published but study carried out by taking future scope as reference and no own idea given	(d) Published but study carried out by taking future scope as reference and own idea and solution given	(e) Original & new work	
		Indicate one among (a) to (e)					
Report quality* [writing format **refer to annx.1(a)**] [8]		Fair	Average	Good	Very Good	Excellent	
		Indicate one grade (from fair to excellent)					
Presentation & Communication skill ** [8]		Fair	Average	Good	Very Good	Excellent	
		Indicate one grade (from fair to excellent)					
Domain knowledge tested in viva** [4]		Fair	Average	Good	Very Good	Excellent	
		Indicate one grade (from fair to excellent)					

4. Rubric for General Proficiency [Group Discussion]

Rubrics - General Proficiency [Group Discussion]					
Criteria [Maximum marks]	**Needs Work (0-25%)**	**Developing (25-50%)**	**Competent (50-75%)**	**Strong (75-100%)**	**Total (50)**
Presentation skill/communication skill/ participation [20]					
	Remarks:				
Domain knowledge [10]					
	Remarks:				
Team work / individual work/initiation [10]					
	Remarks:				
Social / Environmental issues referred to [2]					
	Remarks:				
Ethics [2]					
	Remarks:				
Leadership skill [3]					
	Remarks:				
Conclusion/ Summary [3]					
	Remarks:				

5. Rubrics for Selection of Best B E Project

(B.E. 7th and 8th semester)

Criteria	Disagree	Poor	Below average	Average	Good	Excellent	Total
	(0)	(1-2)	(3-4)	(5-6)	(7-8)	(9-10)	
Novelty of the project							
	Remarks:						
Literature survey							
	Remarks:						
Results and Future scope							
	Remarks:						
Utility/feasibility of practical application							
	Remarks:						
Impact on Society and the Environment							
	Remarks:						
Academic contributions							
	Remarks:						

6. Rubrics for Industrial Visit (As part of the subject "Practical Training" Assessment)

PO	Condition: Your visit to the industry was useful for	Put your assessment mark out of 5					Put the value of 0.6 x (your rating)
		1	2	3	4	5	
1	Engineering knowledge						
5	Knowing the use of modern tools (hardware/software)						
6	Learning the responsibility of engineers to the society						
7	Learning necessity of protection of environment and sustainability of physical resources						
8	Knowing Engineering standards						
9	Knowing the necessity for teamwork in industry						
10	Effective communication among individuals						
11	Learning project management and finance						
12	A boost for lifelong learning						

7. Rubrics for Assignment/Viva

Conditions	Mark
Timely submission on or before deadline	10%
Subject knowledge	30%
Aesthetics of presentation in classified format	20%
Effectiveness/uniqueness in answer to the point	30%
Summary of answers	10%