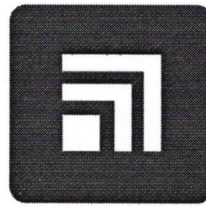


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**HIMACHAL PRADESH**

NAAC ACCREDITED

**Report on PO Attainment**

**Master of Engineering**

**(Computer Science & Engineering)**

**Batch 2019**

**Department of Computer Science &  
Engineering**

**Report on PO Attainment**

**ME -Batch 2019**

**Department of Computer Science & Engineering**

**Dated:22/07/2022**

**Overview**

An outcome is a result of learning that reveals what the student should be able to do at the end of a course; Outcome-based curriculum is a performance-based education system which is crucial in determining the type of graduates we want. In this approach, the desired educational outcomes should be clearly specified. Having an unequivocal outcome facilitates the nature of course offered, its content and also the teaching plans. Constructive alignment is a principle used for devising teaching and learning activities and assessment tasks that directly address the course outcomes (COs) intended. The outcome-based approach provides a mechanism to ensure the accountability and quality assurance to an educational program.

Course mapping shows the educational relationship (Level of Learning achieved) between Course Outcomes and Program Outcomes for a Course. The result strongly indicates whether the students are able to achieve the course learning objectives. The method can be used for any course and is a good way to evaluate a course syllabus.

The below mentioned steps shall address the procedure for assessing the percentage achievement of Program Outcomes.

**Program Outcomes (PO)**

The Program Outcomes for the ME(CSE) Program are the following:

- PO1.** Possess an ability to apply knowledge of Computer Science & Engineering.
- PO2.** Possess an ability to design and conduct experiments, as well as to analyze and interpret data.
- PO3.** Possess an ability to design a system, component or process to meet desired meets within realistic constraints such as economics, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- PO4.** Possess an ability to function on multidisciplinary teams.
- PO5.** Possess an ability to identify, formulate and solve engineering problems
- PO6.** Possess an understanding professional and ethical responsibility.
- PO7.** Possess an ability to communicate effectively.

  
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- PO8.** Possess a capability to understand impact of engineering solutions in a global, economic, environmental, and societal context.
- PO9.** Possess an ability to recognize the need for, and an ability to engage in life-long learning.
- PO10.** Possess an ability to use the techniques, skills, and modern engineering tools necessary for engineering.

**Course Outcomes mapping with Program Outcomes:**

The course learning outcomes were mapped with the defined program outcomes of the Department of Computer Science & Engineering on the scale of High, Medium and Low. Subsequently the mapped values were assigned with the weights i.e. High: 3; Medium: 2; and Low: 1. The subject wise result was compiled for 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> & 6<sup>th</sup> semester.

  
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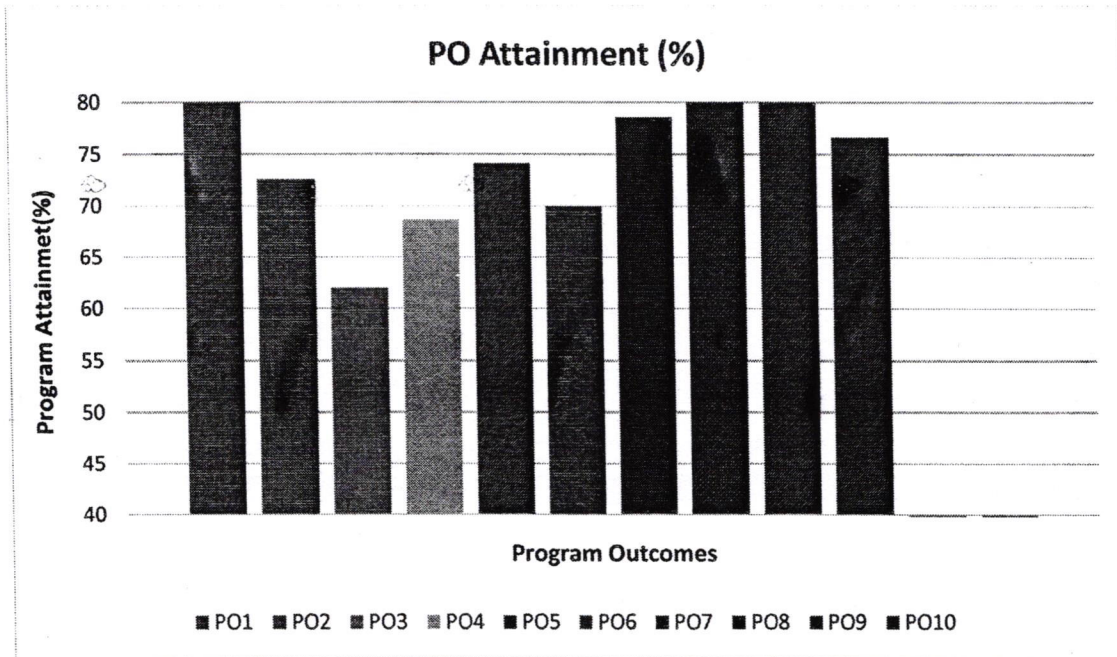


**PO Attainment of Subjects: ME CSE Computer Science & Engineering**

Subject	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CS902	100	100	-	-	100	-	-	-	-	100
CS921	87	87	-	-	-	-	87	-	-	-
CS922	-	-	-	-	-	-	-	-	100	100
CS924	100	-	-	-	100	-	-	100	-	-
CS925	-	100	-	-	-	-	-	-	-	-
RS991	100	-	-	-	-	-	100	100	100	-
CS903	-	-	73	73	73	73	73	-	-	-
CS908	67	-	-	-	-	67	-	-	-	67
CS909	73	73	-	-	-	-	-	-	-	73
CS913	-	53	53	-	53	-	-	-	-	-
RS992	-	-	-	73	73	-	73	-	-	-
CS906	73	-	-	-	-	-	-	-	73	-
CS907	-	60	-	-	60	-	-	-	-	-
CS952	0	-	-	0	-	-	0	-	-	0
RS993	-	-	-	-	-	-	-	-	-	-
CS910	60	60	-	-	60	-	-	-	60	-
CS911	-	60	-	-	-	-	-	60	-	-
CS953	-	-	60	60	-	-	-	-	-	60
CS962	60	60	-	-	-	-	60	-	-	60
RS994	-	-	-	-	-	-	-	-	-	-
RS995	-	-	-	-	-	-	-	-	-	-
POA	80	72.56	62	68.67	74.14	70	78.6	86.67	83.25	76.67

  
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## Representation of PO attainment



### **Analysis: -**

The above representation shows that the students of batch 2019 have successfully attained a minimum of 75%. The further change in the pattern may be observed when the following activities will be added:-

- More assignments and tutorials are to be given to students for better understanding.
- Seminars related to latest engineering topics can be conducted pertaining to respective subjects.
- Students are encouraged to take NPTEL Video Lectures for available courses to handle real-time scenarios

*K. K. Sharma*

**Head of Department**  
Department of Computer Science & Engineering  
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HOD CSE

*[Signature]*

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Programme	ME CSE [Computer Science & Engineering]	Batch 2019
Subject	Advanced Database Management System	Code CS908 Semester 2

Subject Assessment: Advanced Database Management System

#	Tools	Task	Task-Id	Marks	Wt (%)	Weighted Marks (%)
1	Internal	1	236	40	100	40
2	External	1	237	60	100	60

Course Outcome: Advanced Database Management System

SNo	Course Outcome	Wt(%)
CO1	Understand the functionality of the various database systems	34
CO2	Practice the codes and study about the case studies	33
CO3	Implement procedures functions cursors and triggers and become proficient in PLSQL programming skills	33

CO-PO Map: Advanced Database Management System

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Understand the functionality of the various database systems	M	-	-	-	-	L	-	-	-	-	-	-
Practice the codes and study about the case studies	-	-	-	-	-	-	-	-	-	M	-	-
Implement procedures functions cursors and triggers and become proficient in PLSQL programming skills	M	-	-	-	-	L	-	-	-	-	-	-

Course Outcome Contribution in Each Question

Tool	Task No.	QNo	Marks	DL	BT Level	Percentage Contribution of Course Outcome
Internal	1	1	40	Easy	Understanding	CO1 [34], CO2 [33], CO3 [33],
External	1	1	60	Average	Applying	CO1 [34], CO2 [33], CO3 [33],

CO-Assessment-Marks: Advanced Database Management System

We would consider 40% weightage for Internal Marks and 60% weightage for external marks for calculating attainment level of Student Course Outcome. In case of either only internal or external components, we would consider 100%.

CO1: Understand the functionality of the various database systems

#	RollNo	Internal-1[13.6]	External-1[20.4]	Total [34]	MO(%)	Scale
1	M1911984001	7.48	10.54	18	53	2
2	M1911984002	10.88	9.52	20.4	60	3
3	M1911984003	0	0	0	0	1
4	M1911984004	8.16	12.24	20.4	60	3
5	M1911984005	0	0	0	0	1

CO Attainment on Scale of 3	Percentage of Students Scored above 60%
2	40

CO2: Practice the codes and study about the case studies

#	RollNo	Internal-1[13.2]	External-1[19.8]	Total [33]	MO(%)	Scale
1	M1911984001	7.26	10.23	17.5	54	2
2	M1911984002	10.56	9.24	19.8	60	3
3	M1911984003	0	0	0	0	1
4	M1911984004	7.92	11.88	19.8	60	3
5	M1911984005	0	0	0	0	1



CO Attainment on Scale of 3	Percentage of Students Scored above 60%
2	40

CO3: Implement procedures functions cursors and triggers and become proficient in PLSQL programming skills

#	RollNo	Internal-1[13.2]	External-1[19.8]	Total [33]	MO(%)	Scale
1	M1911984001	7.26	10.23	17.5	54	2
2	M1911984002	10.56	9.24	19.8	60	3
3	M1911984003	0	0	0	0	1
4	M1911984004	7.92	11.88	19.8	60	3
5	M1911984005	0	0	0	0	1

CO Attainment on Scale of 3	Percentage of Students Scored above 60%
2	40

Attainment on Scale of 3	Percentage Attainment
2.00	66.67

  
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