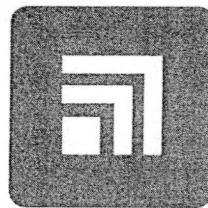**CHITKARA UNIVERSITY**

HIMACHAL PRADESH

NAAC ACCREDITED

Report on PO Attainment

Bachelor of Engineering

Batch 2017

Department of Electronics & Communication Engineering

Report on PO Attainment

Batch 2017

Department of Electronics & Communication Engineering

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 programme.

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 Outcome

The Program Outcomes for the Electronics & Communication Engineering Program are the following:

PO-01: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.

PO-02: Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO-03: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.

PO-04: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO-05: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex.

PO-06: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO-07: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO-08: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO-09: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO-010: Communicate effectively on complex engineering activities with the engineering community and with the society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO-011: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO-012: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Course Outcomes mapping with Program Outcomes:

The course outcomes were mapped with the program outcomes on the scale of High, Medium and Low. Thereafter, the mapped values were allocated with weights i.e., High: 3; Medium: 2; and Low: 1.

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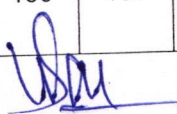HIMACHAL PRADESH - 174103

Subject	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
GEL4101	100	100	-	-	-	100	100	-	-	100	100	-
HUL2101	100	-	-	-	-	100	100	100	-	-	-	-
PYL5101	89	89	89	89	-	89	-	-	-	-	-	-
MEP1102	100	-	-	-	100	-	-	-	-	100	-	-
ME4102	78	-	-	78	78	78	-	-	-	-	-	-
AML5101	67	67	67	-	-	-	-	-	-	-	-	67
ECP1101	100	100	-	100	-	-	-	-	-	100	-	-
ECL5101	89	89	-	89	89	89	-	-	-	-	89	89
PYP1101	100	-	-	100	-	-	-	-	100	-	-	-
CS101	44	44	-	44	-	44	44	44	-	-	44	44
AML5102	67	-	67	-	67	-	67	67	-	67	-	67
EEL4103	83	83	83	83	-	-	-	-	-	-	83	83
EEP1103	78	78	-	-	78	78	78	-	78	-	78	78
CHL4101	89	89	89	-	89	-	-	-	-	-	89	89
CHP1101	100	100	-	-	100	-	-	100	-	-	100	100
MEW2101	100	100	-	100	-	100	100	-	100	-	100	100
HUL3301	-	-	-	-	-	-	-	-	83	83	83	83
GEW2401	100	-	100	-	-	-	-	-	100	100	100	-
CS102	33	33	33	33	-	33	33	33	-	-	-	33
CSL4207	83	-	83	83	83	-	-	-	83	-	-	-
CSL3203	-	75	75	75	75	-	-	-	75	-	-	-
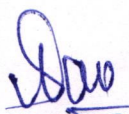
Course												
ECL4207	58	58	58	-	58	-	-	-	58	-	-	-
CSP2203	83	83	83	-	83	-	83	-	-	-	-	-
CSP3213	92	92	92	92	92	-	-	-	-	-	-	-
ECP1207	100	100	100	100	100	-	-	-	-	-	-	-
ECP2203	100	100	100	100	100	100	100	100	-	-	100	100
ECL4205	89	88	88	83	-	-	-	-	-	-	88	-
HUL2401	-	-	-	-	-	100	100	100	100	100	100	100
CS109	-	33	33	33	33	-	-	-	-	-	-	-
ECP1206	100	100	100	100	100	-	-	-	100	100	100	-
ECL4212	100	100	100	100	100	-	-	100	-	100	100	100
ECP1214	100	100	100	100	100	100	100	-	100	100	100	-
ECL4214	100	100	100	100	100	-	-	-	100	100	100	100
ECL4208	83	83	83	83	83	-	-	-	-	83	83	-
ECL4204	92	92	92	92	92	-	-	-	-	-	92	92
ECL4314	100	100	100	100	-	-	-	-	-	100	100	100
ECP1314	100	-	100	100	100	-	-	100	-	100	100	100
ECL4315	100	100	100	-	100	-	-	-	100	-	100	100
ECL4303	100	100	100	-	-	-	-	-	-	-	100	100
ECP2303	-	100	100	-	100	-	-	-	-	-	100	100
ECP1315	100	100	100	100	100	-	-	-	-	-	100	100
ECL4316	100	100	100	100	-	-	-	-	-	-	100	100
ECL4414	100	100	100	100	100	-	-	-	-	-	-	-

Subject												
ECP2313	-	100	100	100	100	-	-	-	-	-	-	-
ECP1305	100	-	100	100	100	-	-	-	100	100	100	100
ECP3204	-	-	100	100	100	100	-	-	-	-	-	-
GTI4301	-	100	100	100	-	-	-	-	-	100	-	-
CLP2305	-	-	-	100	100	100	100	100	100	100	100	100
CSL5210	100	100	100	100	-	-	-	-	-	100	-	-
ECL4322	100	-	100	100	-	-	-	-	-	-	-	-
ECL4311	83	92	89	92	86	-	-	-	-	-	-	-
ECL4317	100	100	100	100	-	100	-	-	-	-	-	-
EC262	100	100	100	100	100	100	-	100	-	-	-	-
ECL4401	100	-	-	100	100	-	-	-	-	100	100	100
ECL4404	100	100	100	-	100	100	100	100	-	-	100	100
ECP1404	100	100	100	100	100	100	-	-	-	-	100	100
ECP2401	-	100	100	100	100	-	-	-	100	100	100	100
ECP6401	-	100	100	100	-	-	-	-	-	100	100	-
ECL4407	-	100	100	100	-	-	-	-	-	-	100	100
ECT9401	-	-	100	-	-	100	-	100	100	100	100	100
POA	91.04	90.16	91.18	91.64	91.25	90.05	85	88	92.71	96.95	95.11	91.13

PO Attainment of subjects: B.E. Electronics & Communication Engineering

Representation of PO attainment:

POA
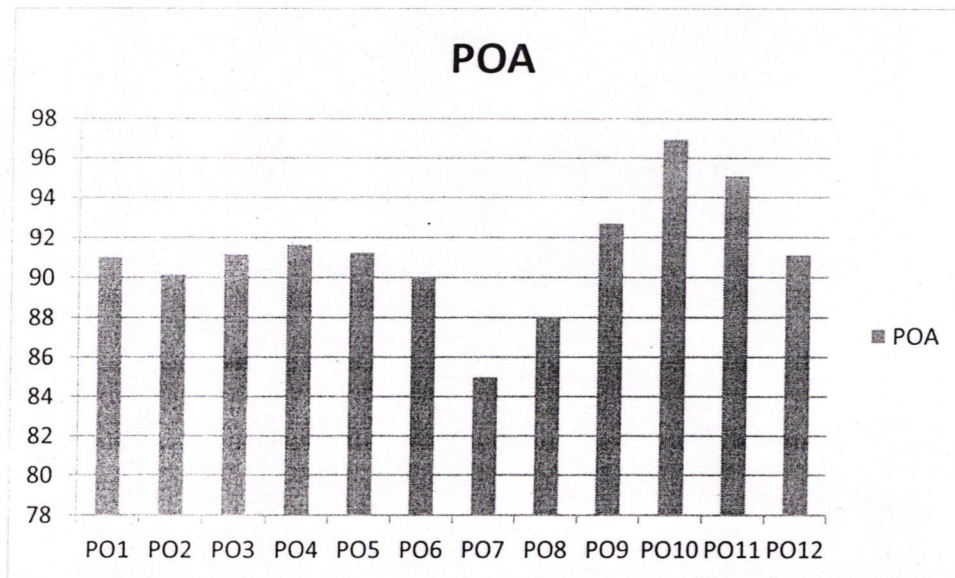
Analysis -

The representation shows that the students of batch 2017 have successfully attained a minimum of 75% in all of the program outcomes. However, the range of attainment is lying between 85% to 97% in all of the program outcomes.

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Department of Electronics &
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School of Engineering & Technology
Chitkara University, Himachal Pradesh

HOD
Department of ECE

CHITKARA UNIVERSITY

Course Outcome Attainment Report

Programme	B.E... [Electronics & Communication Enginering....]	Batch 2017
Subject	Operating system	Code CSL4207 Semester 3

Subject Assessment: *Operating system*

#	Tools	Task	Task-Id	Marks	Wt (%)	Weighted Marks (%)
1	Sessional Tests	1	10	40	100	40
2	End Term	1	11	60	100	60

Course Outcome: *Operating system*

SNo	Course Outcome	Wt(%)
CO1	Identify different types of Operating System and their components.	20
CO2	Design and implementation of new system calls for any open source operating system	20
CO3	Implementation of existing resource management algorithms in Linux operating system	20
CO4	Skilled to Identify various system security and protection issues.	20
CO5	Administer the system using various Operating systems Windows and Ubuntu for managing its resources.	20

CO-PO Map: *Operating system*

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Identify different types of Operating System and their components.	L	-	-	-	-	-	-	-	-	-	-	-
Design and implementation of new system calls for any open source operating system	-	-	M	-	H	-	-	-	-	-	-	-
Implementation of existing resource management algorithms in Linux operating system	-	-	L	L	M	-	-	-	-	-	-	-
Skilled to Identify various system security and protection issues.	-	-	M	-	M	-	-	-	-	-	-	-
Administer the system using various Operating systems Windows and Ubuntu for managing its resources.	-	-	-	L	-	-	-	-	M	-	-	-

Course Outcome Contribution in Each Question

Tool	Task No.	QNo	Marks	DL	BT Level	Percentage Contribution of Course Oucome
Sessional Tests	1	1	40	Average	Remembering	CO1 [20],CO2 [20],CO3 [20],CO4 [20],CO5 [20],
End Term	1	1	60	Average	Remembering	CO1 [20],CO2 [20],CO3 [20],CO4 [20],CO5 [20],

CO-Assessment-Marks: *Operating 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: Identify different types of Operating System and their components.

#	RollNo	Sessional Tests-1[8]	End Term-1[12]	Total [20]	MO(%)	Scale
1	1711980601	3.2	7.6	10.8	54	2
2	1711982001	3.4	5.4	8.8	45	2
3	1711982004	5	8.6	13.6	68	3
4	1711982005	5.8	8.2	14	70	3

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

2.5   50

CO2: Design and implementation of new system calls for any open source operating system

#	RollNo	Sessional Tests-1[8]	End Term-1[12]	Total [20]	MO(%)	Scale
1	1711980601	3.2	7.6	10.8	54	2
2	1711982001	3.4	5.4	8.8	45	2
3	1711982004	5	8.6	13.6	68	3
4	1711982005	5.8	8.2	14	70	3

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

2.5   50

CO3: Implementation of existing resource management algorithms in Linux operating system

#	RollNo	Sessional Tests-1[8]	End Term-1[12]	Total [20]	MO(%)	Scale
1	1711980601	3.2	7.6	10.8	54	2
2	1711982001	3.4	5.4	8.8	45	2
3	1711982004	5	8.6	13.6	68	3
4	1711982005	5.8	8.2	14	70	3

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

2.5   50

CO4: Skilled to Identify various system security and protection issues.

#	RollNo	Sessional Tests-1[8]	End Term-1[12]	Total [20]	MO(%)	Scale
1	1711980601	3.2	7.6	10.8	54	2
2	1711982001	3.4	5.4	8.8	45	2
3	1711982004	5	8.6	13.6	68	3
4	1711982005	5.8	8.2	14	70	3

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

2.5   50

CO5: Administer the system using various Operating systems Windows and Ubuntu for managing its resources.

#	RollNo	Sessional Tests-1[8]	End Term-1[12]	Total [20]	MO(%)	Scale
1	1711980601	3.2	7.6	10.8	54	2
2	1711982001	3.4	5.4	8.8	45	2
3	1711982004	5	8.6	13.6	68	3
4	1711982005	5.8	8.2	14	70	3

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

2.5   50

Attainment on Scale of 3   Percentage Attainment
2.50   83.33

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