

### HIMACHAL PRADESH

**NAAC ACCREDITED** 

# **Report on PO Attainment**

Bachelor of Engineering
(Computer Science & Engineering)

Batch 2016

Department of Computer Science & Engineering



### Report on PO Attainment

#### Batch 2016

### Department of Computer Science & Engineering

Dated: 28/08/2020

### **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 BE(CSE) Program are the following:

- **PO1.** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PO2.** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **PO3.** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO4. 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.

CHITKARA UNIVERSITY BAROTIWALA, DISTT. SOLAN HIMACHAL PRADESH - 174103



- PO5. Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- **PO6.** 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.
- PO7. Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO8.** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9. Function effectively as an individual, and as a member or leader in diverse teams, and multidisciplinary settings.
- PO10. Communicate effectively on complex engineering activities with the engineering community and with 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.
- **PO11.** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **PO12.** 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 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 1st, 2nd, 3rd, 4th, 5th, 6th, 7th & 8th semester.

REGISTRAR CHITKARA UNIVERSITY BAROTIWALA, DISTT. SOLAN HIMACHAL PRADESH - 174103

## PO Attainmen of Subjects: B.E. Computer Sci€ ce and Engineering

Subject	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010	P011	P012
CSL4103	68	68	-	68	69	-		-	-	68	<sup>,</sup> 68	68
CSP1103	-	72	72	72	-	-	-	-	-	-	72	-
AML5101	-	80	80	80	-	-	-	-	₩ -	-	-	-
EEP1103	-	-	-	99	99	99	99	99	•	-	-	-
MEL4102	-	-		-	-	-	-		-	-	-	-
MEP1102	72	72	-	-	-	-	-	-	72	72	72	72
GEL4101	-	-	-	-	-	-	-	91	91	91	91	91
HUL2101	-	-	-	-	-	87	87	87	87	87	-	•
AML4209	-	-	-	-	-	-	-	-	94	94	94	94
PYL5101	-	59	-	-	-	59	59	59	59	59	· -	-
PYP1101	-	-	69	-	-	69	69	69	69	69	-	-
MEW2101	89	89	-	-	-	-	-	89	∜ 89	89	89	89
ECL5101	-	-	-	-	-	-	-	-	83	83	-	83
ECP1101	-	-	-	-	-	-	88	-	88	88	88	-
CHL4101	-	60	-	-	-	60	60	60	60	60		-
CHP1101	-	-	-	-	-	-	-	-	70	70		-
AST3101	87	87	87	87	87	-	-	-	87	87	87	87
ASP3101	85	85	85	85	85	-	-	-	85	85	85	85
ECL4207	-	63	-	-	-	63	63	63	63	63 .	-	-
CSL3203	58	58	58	-	58	-	-	-	-	-	-	-
CSL4209	64	64	-	-	-	-	-	64	, 64	64	64	64
CSL4102	53	53	53	-	-	-	-	-	53	53	53	54
ECP1207	69	69	-	69	-	-	-	69	69	69	69	69
CSP3209	69	69	-	-	-	-	-	69	69	69	69	69
CSP2203	71	71	-	-		-	-	71	71	71	71	71
CSP2102	93	93	93	-	-	-	- "	-	93	93	- "	93
CSP3213	70	70	-	70	-	-	-		-	-	70	-
CSP2206	68	69	68	68	68	-	-	68	69	, -	69	
SP2204	95	95	95	95	95	-	-	-	95	95	95	95
SP2201	86	86	86	-		-	-		-	86	86	86
\$4207	61	61	61	-	-	-	61	-	0	-		-
\$1,4206	-	61	61	61	•	-	-	-	-	-	-	•
SL3201 <sub>Y</sub>	55	55	55	-	-	-	-	-	-	55	55	55

REGISTRAP CHITKARA

BAROTIWALA, DISTT. SOLAN HIMACHAL PRADESH - 174103

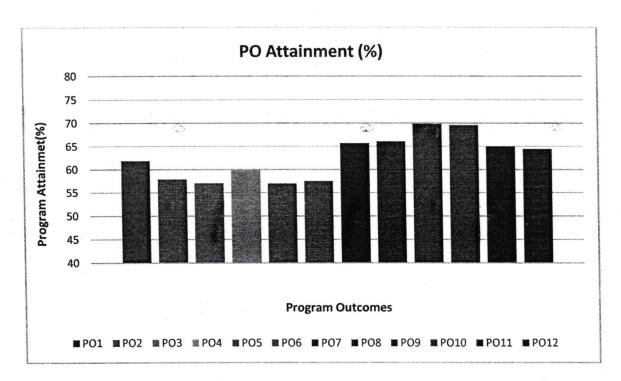
							-																												
8	r	,	,		8	33	58	84	8	•	34	33	35	•	38	38	8	52		43		75	65	92	,		'	1	37	•	98		,		27
71			, 93	43	•	33	58	84	,	34	34	, 33	35		-	38	•	52		43	26	75	65	92		54	•	45	37		98 ,			79	27
,	1	T.		•		33	58		1	34		33			•	-		52		43		75	65	92		-	•	•	•		98		8		22
•	1	•		•		33	-	84		•		33	35	- ্	•	8	8	52		-	-	75	ا د		•	•		•	9	38	98	70	<b>.</b>	•	57
•			63	43	•	33			•	•	-	33		-		•	•	52	•	1		75			38		-		•	38	98	70			
	•	•			•	,	· •	ı	-	-	-	-		-		-	•	•		•					38	-	-	•	•	38		70			
•	•	•		1	T			•	-	34	34	-							•		1	-	Ι,		38	54				•		,			
-	٠	8	93	43	22	,		84	-	34	34	-	8	38	38	38	44			1		75			38	54	38		37	38			22		22
71	62	•	93	43	26			84	-	34	34		35	38		38			•	43		75	65		38	•	38	-	37	38	98		22	79	22
<b>!</b> (		43	93	43	26		28	84	36	34	34		35	38	38	38	44		41	43	56	75	65		38	54	38	45	37				22	79	22
71	62	43		43	26	33	28		36	34	34	33	35	38	38	38	44	52	41	43	26	75	65	92	38	54	38	45	37	38	98		22	79	22
71	62	43	93	43	26	33	28	84	36	34	1	33	•	-	-	-	•	52	41	43	26	-	65	92	38	54	•	45		-	98			79	22
AMP1201	AML3201	CSP2325	CSP2301	CSP2210	CSL5301	CSL3307	CSL2307	CSL2301	CSL5210	CSQ3102	CSQ3101	CSP1307	CSL4341	CSA4301	CSA3302	CSA3103	CSL4318	CSL3306	CSL5305	CSL4338	CSL4336	GTI4301	CSL3302	CSP3203	CSA4302	CSL4208	CSA4303	CSL4306	CSL4348	EP3001	CLP2305	CSL4302	WHUL2401	T)	A, <b>CST94f0.</b> AN RADESH - 174103
	9				۵		,										9						* g								(		A	REGISTRAR CHITKARA UN	SAROTIWALA

CSP4401	72	72	72	72	72	-	-	-	72	72	72	/2
CSP1310	54	54		54	54	-	•	-	-	-	-	54
CSP1308	49	49	49	49	49	-	-	-	-	-	,	-
CSP1304	53	53	53	53	53	-	•	- ,	-	-	-	53
CSL5411	55	55	54	54	54	-	-		<i>₹</i> -	-	-	54
CSL5407	-	37	37	37	37	37	-	-	-	-	-	-
CSL3310	54	54	54	54	54	-	-	-	-	-	-	54
CSL3308	46	46	46	46	46	-	-	-	-	-	-	-
CSL3304	46	46	46	46	46	-	-	-	-	-	-	46
CSP1406	-	51	51	51	-	-	-	-	-	51	51	-
CSL3406	49	49	49	49	-	-	-	-	-	-	49	49
CST9411	-	-	-	-	-	57	57	-	57	-	-	-
CST9401	75	75	75	75	75	-	-	<b>65</b>	75	75	75	75
POA	61.87	57.9	57.04	59.84	56.97	57.5	65.67	66.04	69.86	69.58	64.98	64.39

CHITKARA UNIVERSITY BAROTIWALA, DISTT. SOLAN HIMACHAL PRADESH - 174103



### Representation of PO attainment



### Analysis: -

The representation shows that the students of batch 2016 have successfully attained a minimum of 65%. This indicates that the evaluation pattern has been consistent in terms of questions asked and the marks obtained by the students have been consistent. The further change in the pattern may be observed when more industry interaction and courses are taught.

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

School of Engineering & Technology

Chitkara University, Himachal Pradesh

REGISTRAR

CHITKARA UNIVERSITY BAROTIWALA, DISTT. SOLAN

HIMACHAL PRADESH - 174103

HOD CSE



### Course Outcome Attainment Report

Programme

B.E. [Computer Science and Engineering]

Batch 2016

Subject

Client Side Technologies

Code CSL4209

Semester 3

### Subject Assessment: Client Side Technologies

#	Tools	Task	Task-Id	Marks	Wt (%)	Weighted Marks (%)
1	Internal	1	36	40	100	40
2	External	1	37	60	100	60

#### Course Outcome: Client Side Technologies

SNo	Course Outcome 🛇	w(%)
CO1	Identify the basis of designing a Web site create Web pages links images tables and pages layouts in HTML	20
CO2	Describe and identify the use of JavaScript and successfully place it into Web pages and also recognize the skills and uses of JavaScript.	20
CO3	Use JavaScript to manipulate elements in the DOM to change appearance and visibility.	20
CO4	Describe how intended website design features will specifically benefit a target user group content strategy	20
CO5	Demonstrate and develop web-portals independently or in teams.	20

### CO-PO Map: Client Side Technologies

Course Outcome	P01	PO2	PO3	P04	PO5	PO6	P07	PO8	PO9	PO10	PO11	PO12
Identify the basis of designing a Web site create Web pages links images tables and pages layouts in HTML	-	•	-	•	-	•	•	-	•	•	М	Н
Describe and identify the use of JavaScript and successfully place it into Web pages and also recognize the skills and uses of JavaScript.	Н	Н	•	•	•		•	-	н	М	•	Н
Use JavaScript to manipulate elements in the DOM to change appearance and visibility.	•	-	•	•	-	-	-	н	-	•	М	-
Describe how intended website design features will specifically benefit a target user group content strategy	•	-	•	•	•	-	•	-	-	M	Н	•
Demonstrate and develop web-portals independently or in teams.	н	н		-	-		-		н	M	-	н

### Course Outcome Contribution in Each Question

Tool	Task No.	QNo	Marks	DL	BT Level	Percentage Contribution of Course Oucome
Internal	1	1	40	Average	Understanding	CO1 [20],CO2 [20],CO3 [20],CO4 [20],CO5 [20],
External	1	1	60	Average	Understanding	CO1 [20],CO2 [20],CO3 [20],CO4 [20],CO5 [20],

### CO-Assessment-Marks: Client Side Technologies

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 the basis of designing a Web site create Web pages links images tables and pages layouts in HTML

#	RollNo	Internal-1[8]	External-1[12]	Total [20]	MO(%)	Scale
1	1611981005	3.2	6	9.2	46	2
2	1611981008	5.4	8	13.4	67	3
3	1611981474	7.8	6,8	14.4	72	3
4	1611981033	6.2	9.4	15.6	78	3
5	1611981036	3.4	6,6	10	50	2
6	1611981040	2.6	0	2.6	13	1
7	1611981042	3.8	4	7.8	39	1
8	1611981044	5.4	9.6	15	75	3
9	1611981045	3.2	4.2	7.4	37	1
10	1611981455	4.2	4.8	9	45	2
11	1611981055	5.2	6.2	11.4	58	2
12	1611981444	4.6	6.2	10.8	54	2
13	1611981057	7.2	10.4	17.6	. 89	3

REGISTRAR
CHITKARA UNIVERSITY
BAROTIWALA, DISTT. SOLAN
HIMACHAL PRADESH - 174103

371	1611981431	0	0	0	0	1
372	1611981439	0	0	0	0	1
373	1611981426	0	0	0	0	1
374	1611981435	0	0	0	0	1
375	1611981373	0	0	0	0	1
376	1611981374	0	0	0	0	1
377	1611981375	0	0	0	0	1
378	1611981376	0	0	0	0	1
379	1611981377	0	. 0	0 -	. 0	1
380	1611981380	0	0	0	0	1
381	1611981383	0	0	0	0	1
382	1611981384	0	0	0	0	1
383	1611981385	0	0	0	0	1
384	1611981388	0	0	0	0	1
385	1611981390	0	0	0	0	1
386	1611981391	0	0	0	0	1
387	1611981424	0	0	0	0	1
388	1611981393	√ O	0 🔊	0	-0	1
389	1611981397	0	0	0	0	1
390	1611981400	0	0	0	0	1
391	1611981401	0	0	0	0	1
392	1611981402	0	0	0	0	1
393	1611981403	0	0	0	0	1
394	1611981405	0	0	0	0	1
395	1611981420	0	0	0	0	1
396	1611981407	0	0 ,	0	0	1
397	1611981408	0	0	0	. 0	1
398	1611981410	. 0	0	0	0	1
399	1611981411	0	0	0	0	1
400	1611981412	0	0	0	0	1
401	1611981413	0	0	0	0	1
402	1611981418	0	0	0	0	1
403	1611981419	0	0	. 0	0	1
404	1611981421	0	0	0	0	1
405	1611981422	0	0	0	0	1
406	1611981423	6,2	8,6	14.8	74	3

CO Attainment on Scale of 3	Percentage of Students Scored above 60%
1.93	39.16

Attainment on Scale of 3	Percentage Attainment
1.93	64.33

REGISTRAR
CHITKARA UNIVERSITY
BAROTIWALA, DISTT. SOLAN
HIMACHAL PRADESH - 174103