

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Outcome CIE Attainments

Course	Subject Code & (Subject Name)	CO1	CO2	CO3	CO4	CO5	CO6	Overall CIE Attainment
C111	R16HAS1101 – English	3	3	3	3	3	3	3
C112	R16MTH1101 – Mathematics - I	3	3	3	3	3	3	3
C113	R16EPH1101 – Engineering Physics - I	3	1.7	3	3	3	2.4	2.68
C114	R16CSE1101 – Computer Programming	3	3	3	3	3	3	3
C115	R16MED1144 – Engineering Drawing	3	3	2.5	3	3	1.5	2.66
C116	R16HAS1201 – Engineering Language & Communication Skills Lab	2	3	2	3	3	2	2.5
C117	R16CSE1201 – Computer Programming Lab	3	3	3	3	3	3	3
C118	R16MED1201 – Workshop Practice	3	3	3	3	3	3	3
C121	R16MTH1102 – Mathematics - II	3	3	3	3	3	3	3
C122	R16MTH1103 – Numerical Methods	3	3	3	3	3	3	3
C123	R16EPH1102 – Engineering Physics - II	3	3	3	3	3	3	3
C124	R16CSE1102 – Data Structures through 'C'	3	3	3	3	3	3	3
C125	R16ECH1101 – Engineering Chemistry	3	3	3	3	3	3	3
C126	R16CSE1202 – Data Structures through 'C' Lab	3	3	3	3	3	3	3
C127	R16ECH1201 – Engineering Chemistry Lab	3	3	3	3	3	3	3
C121	R16EPH1201 – Engineering Physics II Lab	1.8	1.8	1.8	3	3	3	2.4
C211	R16MTH1105 – Probability and Statistics	3	2.2	2.3	2.5	3	2.2	2.53
C212	R16CSE1103 – Mathematical Foundations of Computer Science	3	3	1.6	3	3	3	2.76
C213	R16CSE1104 – Data Structures through C++	3	3	3	3	3	3	3
C214	R16ECE1136 – Digital Logic Design	2.5	2.4	1.8	2.2	1.9	1.8	2.1
C215	R16ECE1102 – Electronic Devices and Circuits	2.7	3	2.9	2.5	2.7	2.7	2.75
C216	R16EEE1130 – Basic Electrical Engineering	3	3	1.4	3	2.5	1.6	2.41
C21L7	R16EEE1212 – Electrical and Electronics Lab	3	3	3	3	3	3	3
C21L8	R16CSE1203 – Data Structures through C++ Lab	2.9	3	3	3	3	2.7	2.93
C221	R16CSE1105 – Computer Organization	3	3	3	3	3	2.8	2.96
C222	R16CSE1106 – Database Management Systems	3	3	2.6	3	3	2.7	2.88
C223	R16CSE1107 – Java Programming	3	3	3	3	3	3	3
C224	R16HAS1102 – Environmental Studies	2.1	2.8	2	2.3	2.5	2.7	2.4

C225	R16CSE1108 – Formal Languages and Automata Theory	2	1.8	2	1.9	2.6	2.4	2.11
C226	R16CSE1109 – Design and Analysis of Algorithms	3	2.3	2.2	2.3	2.3	3	2.51
C227	R16CSE1204 – Java Programming Lab	3	3	2.9	3	2.8	3	2.95
C228	R16CSE1205 – Database Management Systems Lab	3	3	3	3	3	3	3
C311	R16CSE1110 - Principles of Programming Languages	3	2.9	2.7	3	3	3	2.9
C312	R16HAS1105 - Human Values and Professional Ethics	2.8	1.1	1.2	3	2.6	3	2.28
C313	R16CSE1113 - Software Engineering	3	1.9	3	3	3	2.9	2.8
C314	R16CSE1118 - Compiler Design	2.2	1.9	3	3	2.9	3	2.66
C315	R16CSE1114 - Operating Systems	1.9	3	3	3	3	3	2.81
C316	R16CSE1139 - Computer Networks	2.7	1.7	2.5	3	3	3	2.65
C31L7	R16CSE1206 - Operating systems Lab	3	3	3	3	3	3	3
C31L8	R16CSE1207- Compiler Design Lab	3	3	3	3	3	3	3
C321	R16CSE1143 - Distributed Systems	3	3	1.6	3	3	3	2.76
C322	R16CSE1117 - Information Security	3	3	3	3	3	3	3
C323	R16CSE1116 -Object Oriented Analysis and Design	2.9	2.5	3	3	3	3	2.9
C324	R16CSE1121 - Software Testing Methodologies	2.2	2.1	3	3	3	3	2.71
C325	R16CSE1103 - Managerial Economics Financial Analysis	3	1.4	2	3	3	3	2.56
C326	R16CSE1119 - Web Technologies	1.8	3	2	3	3	3	2.63
C32L7	R16CSE1215 - Case Tools & Web Technologies Lab	3	3	3	3	3	3	3
C32L8	R16HAS1202 Advanced English language Communication Skills Lab	3	3	3	3	3	3	3
C411	R16CSE1120 - Linux Programming	3	3	3	3	3	3	3
C412	R16CSE1128 - Design Patterns	3	3	3	2.4	2.6	3	2.83
C413	R16CSE1122 - Data Warehousing and Data Mining	3	3	3	2.7	2.7	3	2.9
C414	R16CSE1125 - Cloud Computing	3	3	3	2.9	3	3	2.98
C415	R16CSE1127 - Mobile Computing	3	3	3	3	3	3	3
C416	R16CSE1112 - COMPUTER FORENSICS	3	3	3	2.8	2.9	3	2.95
C41L7	R16CSE1208 - Linux Programming lab	3	3	3	3	3	3	3
C41L8	R16CSE1216 - Data Warehousing and Mining LAB	3	3	3	3	3	3	3
C421	R16HAS1104 - Management Science	3	3	3	3	3	3	3
C422	R16CSE1135 - Multimedia & Rich Internet Applications	3	3	3	3	3	3	3
C423	R16CSE1136 - AD hoc and Sensor Networks	3	3	3	3	3	3	3

Course Outcome SEE Attainment

Course	Subject Code & (Subject Name)	CO1	CO2	CO3	CO4	CO5	CO6	Overall SEE Attainment
C111	R16HAS1101 – English	2.1	2.1	2.1	2.1	2.1	2.1	2.1
C112	R16MTH1101 – Mathematics - I	2	2	2	2	2	2	2
C113	R16EPH1101 – Engineering Physics - I	2.1	2.1	2.1	2.1	2.1	2.1	2.1
C114	R16CSE1101 – Computer Programming	1.5	1.5	1.5	1.5	1.5	1.5	1.5
C115	R16MED1144 – Engineering Drawing	2.7	2.7	2.7	2.7	2.7	2.7	2.7
C116	R16HAS1201 – Engineering Language & Communication Skills Lab	2.3	2.3	2.3	2.3	2.3	2.3	2.3
C117	R16CSE1201 – Computer Programming Lab	2.6	2.6	2.6	2.6	2.6	2.6	2.6
C118	R16MED1201 – Workshop Practice	2	2	2	2	2	2	2
C121	R16MTH1102 – Mathematics - II	2.3	2.3	2.3	2.3	2.3	2.3	2.3
C122	R16MTH1103 – Numerical Methods	2.6	2.6	2.6	2.6	2.6	2.6	2.6
C123	R16EPH1102 – Engineering Physics - II	2.2	2.2	2.2	2.2	2.2	2.2	2.2
C124	R16CSE1102 – Data Structures through ‘C’	2.3	2.3	2.3	2.3	2.3	2.3	2.3
C125	R16ECH1101 – Engineering Chemistry	2.2	2.2	2.2	2.2	2.2	2.2	2.2
C126	R16CSE1202 – Data Structures through ‘C’ Lab	2.3	2.3	2.3	2.3	2.3	2.3	2.3
C127	R16ECH1201 – Engineering Chemistry Lab	2.1	2.1	2.1	2.1	2.1	2.1	2.1
C121	R16EPH1201 – Engineering Physics II Lab	1.4	1.4	1.4	1.4	1.4	1.4	1.4
C211	R16MTH1105 – Probability and Statistics	2.6	2.6	2.6	2.6	2.6	2.6	2.6
C212	R16CSE1103 – Mathematical Foundations of Computer Science	2	2	2	2	2	2	2
C213	R16CSE1104 – Data Structures through C++	2.2	2.2	2.2	2.2	2.2	2.2	2.2
C214	R16ECE1136 – Digital Logic Design	2	2	2	2	2	2	2
C215	R16ECE1102 – Electronic Devices and Circuits	2.5	2.5	2.5	2.5	2.5	2.5	2.5
C216	R16EEE1130 – Basic Electrical Engineering	2.5	2.5	2.5	2.5	2.5	2.5	2.5
C21L7	R16EEE1212 – Electrical and Electronics Lab	3	3	3	3	3	3	3
C21L8	R16CSE1203 – Data Structures through C++ Lab	3	3	3	3	3	3	3
C221	R16CSE1105 – Computer Organization	2.4	2.4	2.4	2.4	2.4	2.4	2.4

C222	R16CSE1106 – Database Management Systems	2.9	2.9	2.9	2.9	2.9	2.9	2.9
C223	R16CSE1107 – Java Programming	2.4	2.4	2.4	2.4	2.4	2.4	2.4
C224	R16HAS1102 – Environmental Studies	2.6	2.6	2.6	2.6	2.6	2.6	2.6
C225	R16CSE1108 – Formal Languages and Automata Theory	2.7	2.7	2.7	2.7	2.7	2.7	2.7
C226	R16CSE1109 – Design and Analysis of Algorithms	2.8	2.8	2.8	2.8	2.8	2.8	2.8
C227	R16CSE1204 – Java Programming Lab	3	3	3	3	3	3	3
C228	R16CSE1205 – Database Management Systems Lab	3	3	3	3	3	3	3
C311	R16CSE1110 - Principles of Programming Languages	2.1	2.1	2.1	2.1	2.1	2.1	2.1
C312	R16HAS1105 - Human Values and Professional Ethics	2.8	2.8	2.8	2.8	2.8	2.8	2.8
C313	R16CSE1113 - Software Engineering	2.5	2.5	2.5	2.5	2.5	2.5	2.5
C314	R16CSE1118 - Compiler Design	2.7	2.7	2.7	2.7	2.7	2.7	2.7
C315	R16CSE1114 - Operating Systems	2	2	2	2	2	2	2
C316	R16CSE1139 - Computer Networks	2.5	2.5	2.5	2.5	2.5	2.5	2.5
C31L7	R16CSE1206 - Operating systems Lab	2.4	2.4	2.4	2.4	2.4	2.4	2.4
C31L8	R16CSE1207- Compiler Design Lab	3	3	3	3	3	3	3
C321	R16CSE1143 - Distributed Systems	2.7	2.7	2.7	2.7	2.7	2.7	2.7
C322	R16CSE1117 - Information Security	2.6	2.6	2.6	2.6	2.6	2.6	2.6
C323	R16CSE1116 -Object Oriented Analysis and Design	2.5	2.5	2.5	2.5	2.5	2.5	2.5
C324	R16CSE1121 - Software Testing Methodologies	2.6	2.6	2.6	2.6	2.6	2.6	2.6
C325	R16CSE1103 - Managerial Economics Financial Analysis	2.8	2.8	2.8	2.8	2.8	2.8	2.8
C326	R16CSE1119 - Web Technologies	2.7	2.7	2.7	2.7	2.7	2.7	2.7
C32L7	R16CSE1215 - Case Tools & Web Technologies Lab	3	3	3	3	3	3	3
C32L8	R16HAS1202 Advanced English language Communication Skills Lab	3	3	3	3	3	3	3
C411	R16CSE1120 - Linux Programming	1.6	1.6	1.6	1.6	1.6	1.6	1.6

C412	R16CSE1128 - Design Patterns	2.5	2.5	2.5	2.5	2.5	2.5	2.5
C413	R16CSE1122 - Data Warehousing and Data Mining	2.9	2.9	2.9	2.9	2.9	2.9	2.9
C414	R16CSE1125 - Cloud Computing	2.9	2.9	2.9	2.9	2.9	2.9	2.9
C415	R16CSE1127 - Mobile Computing	2.4	2.4	2.4	2.4	2.4	2.4	2.4
C416	R16CSE1112 - COMPUTER FORENSICS	2.7	2.7	2.7	2.7	2.7	2.7	2.7
C41L7	R16CSE1208 - Linux Programming lab	2.4	2.4	2.4	2.4	2.4	2.4	2.4
C41L8	R16CSE1216 - Data Warehousing and Mining LAB	3	3	3	3	3	3	3
C421	R16HAS1104 - Management Science	2.8	2.8	2.8	2.8	2.8	2.8	2.8
C422	R16CSE1135 - Multimedia & Rich Internet Applications	2.9	2.9	2.9	2.9	2.9	2.9	2.9
C423	R16CSE1136 - AD hoc and Sensor Networks	2.3	2.3	2.3	2.3	2.3	2.3	2.3

Course Outcome Attainment Rubrics

Course	Subject Code & (Subject Name)	Rubrics
C111	R16HAS1101 – English	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C112	R16MTH1101 – Mathematics - I	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C113	R16EPH1101 – Engineering Physics - I	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C114	R16CSE1101 – Computer Programming	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C115	R16MED1144 – Engineering Drawing	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C116	R16HAS1201 – Engineering Language & Communication Skills Lab	If attainment % ≥ 50 and ≤ 59 then significance level is 1 if attainment % ≥ 60 and ≤ 69 then significance level is 2

		If attainment % ≥ 70 significance level is 3
C117	R16CSE1201 – Computer Programming Lab	If attainment % ≥ 50 and ≤ 59 then significance level is 1 if attainment % ≥ 60 and ≤ 69 then significance level is 2 If attainment % ≥ 70 significance level is 3
C118	R16MED1201 – Workshop Practice	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C121	R16MTH1102 – Mathematics - II	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C122	R16MTH1103 – Numerical Methods	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C123	R16EPH1102 – Engineering Physics - II	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C124	R16CSE1102 – Data Structures through ‘C’	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C125	R16ECH1101 – Engineering Chemistry	If attainment % ≥ 40 and ≤ 49 then significance level is 1 if attainment % ≥ 50 and ≤ 59 then significance level is 2 If attainment % ≥ 60 significance level is 3
C126	R16CSE1202 – Data Structures through ‘C’ Lab	If attainment % ≥ 50 and ≤ 59 then significance level is 1 if attainment % ≥ 60 and ≤ 69 then significance level is 2 If attainment % ≥ 70 significance level is 3
C127	R16ECH1201 – Engineering Chemistry Lab	If attainment % ≥ 50 and ≤ 59 then significance level is 1 if attainment % ≥ 60 and ≤ 69 then significance level is 2 If attainment % ≥ 70 significance level is 3
C121	R16EPH1201 – Engineering Physics II Lab	If attainment % ≥ 50 and ≤ 59 then significance level is 1 if attainment % ≥ 60 and ≤ 69 then significance level is 2 If attainment % ≥ 70 significance level is 3
C211	R16MTH1105 – Probability and Statistics	If attainment % ≥ 50 and ≤ 59 then significance level is 1 if attainment % ≥ 60 and ≤ 79 then significance level is 2

		If attainment % ≥ 80 significance level is 3
C212	R16CSE1103 – Mathematical Foundations of Computer Science	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C213	R16CSE1104 – Data Structures through C++	If attainment % ≥ 50 and ≤ 59 then significance level is 1 if attainment % ≥ 60 and ≤ 69 then significance level is 2 If attainment % ≥ 70 significance level is 3
C214	R16ECE1136 – Digital Logic Design	If attainment % ≥ 60 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C215	R16ECE1102 – Electronic Devices and Circuits	If attainment % ≥ 50 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C216	R16EEE1130 – Basic Electrical Engineering	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C21L7	R16EEE1212 – Electrical and Electronics Lab	If attainment % ≥ 70 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C21L8	R16CSE1203 – Data Structures through C++ Lab	If attainment % ≥ 70 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C221	R16CSE1105 – Computer Organization	If attainment % ≥ 50 and ≤ 59 then significance level is 1 if attainment % ≥ 60 and ≤ 69 then significance level is 2 If attainment % ≥ 70 significance level is 3
C222	R16CSE1106 – Database Management Systems	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C223	R16CSE1107 – Java Programming	If attainment % ≥ 50 and ≤ 59 then significance level is 1 if attainment % ≥ 60 and ≤ 69 then significance level is 2 If attainment % ≥ 70 significance level is 3
C224	R16HAS1102 – Environmental Studies	If attainment % ≥ 60 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2

		If attainment % ≥ 90 significance level is 3
C225	R16CSE1108 – Formal Languages and Automata Theory	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C226	R16CSE1109 – Design and Analysis of Algorithms	If attainment % ≥ 65 and ≤ 74 then significance level is 1 if attainment % ≥ 75 and ≤ 84 then significance level is 2 If attainment % ≥ 85 significance level is 3
C227	R16CSE1204 – Java Programming Lab	If attainment % ≥ 70 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C228	R16CSE1205 – Database Management Systems Lab	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C311	R16CSE1110 - Principles of Programming Languages	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C312	R16HAS1105 - Human Values and Professional Ethics	If attainment % ≥ 60 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C313	R16CSE1113 - Software Engineering	If attainment % ≥ 55 and ≤ 74 then significance level is 1 if attainment % ≥ 75 and ≤ 84 then significance level is 2 If attainment % ≥ 85 significance level is 3
C314	R16CSE1118 - Compiler Design	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C315	R16CSE1114 - Operating Systems	If attainment % ≥ 50 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C316	R16CSE1139 - Computer Networks	If attainment % ≥ 55 and ≤ 64 then significance level is 1 if attainment % ≥ 65 and ≤ 84 then significance level is 2 If attainment % ≥ 85 significance level is 3
C31L7	R16CSE1206 - Operating systems Lab	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2

		If attainment % ≥ 80 significance level is 3
C31L8	R16CSE1207- Compiler Design Lab	If attainment % ≥ 70 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C321	R16CSE1143 - Distributed Systems	If attainment % ≥ 55 and ≤ 64 then significance level is 1 if attainment % ≥ 65 and ≤ 74 then significance level is 2 If attainment % ≥ 85 significance level is 3
C322	R16CSE1117 - Information Security	If attainment % ≥ 55 and ≤ 64 then significance level is 1 if attainment % ≥ 65 and ≤ 84 then significance level is 2 If attainment % ≥ 85 significance level is 3
C323	R16CSE1116 -Object Oriented Analysis and Design	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C324	R16CSE1121 - Software Testing Methodologies	If attainment % ≥ 55 and ≤ 64 then significance level is 1 if attainment % ≥ 65 and ≤ 74 then significance level is 2 If attainment % ≥ 75 significance level is 3
C325	R16CSE1103 - Managerial Economics Financial Analysis	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C326	R16CSE1119 - Web Technologies	If attainment % ≥ 65 and ≤ 64 then significance level is 1 if attainment % ≥ 75 and ≤ 84 then significance level is 2 If attainment % ≥ 85 significance level is 3
C32L7	R16CSE1215 - Case Tools & Web Technologies Lab	If attainment % ≥ 70 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C32L8	R16HAS1202 Advanced English language Communication Skills Lab	If attainment % ≥ 70 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C411	R16CSE1120 - Linux Programming	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 79 then significance level is 2 If attainment % ≥ 80 significance level is 3
C412	R16CSE1128 - Design Patterns	If attainment % ≥ 55 and ≤ 74 then significance level is 1 if attainment % ≥ 75 and ≤ 84 then significance level is 2

		If attainment % ≥ 85 significance level is 3
C413	R16CSE1122 - Data Warehousing and Data Mining	If attainment % ≥ 65 and ≤ 74 then significance level is 1 if attainment % ≥ 75 and ≤ 84 then significance level is 2 If attainment % ≥ 85 significance level is 3
C414	R16CSE1125 - Cloud Computing	If attainment % ≥ 55 and ≤ 79 then significance level is 1 if attainment % ≥ 75 and ≤ 89 then significance level is 2 If attainment % ≥ 85 significance level is 3
C415	R16CSE1127 - Mobile Computing	If attainment % ≥ 60 and ≤ 70 then significance level is 1 if attainment % ≥ 70 and ≤ 80 then significance level is 2 If attainment % ≥ 80 significance level is 3
C416	R16CSE1112 - COMPUTER FORENSICS	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C41L7	R16CSE1208 - Linux Programming lab	If attainment % ≥ 70 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C41L8	R16CSE1216 - Data Warehousing and Mining LAB	If attainment % ≥ 70 and ≤ 79 then significance level is 1 if attainment % ≥ 80 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C421	R16HAS1104 - Management Science	If attainment % ≥ 60 and ≤ 69 then significance level is 1 if attainment % ≥ 70 and ≤ 89 then significance level is 2 If attainment % ≥ 90 significance level is 3
C422	R16CSE1135 - Multimedia & Rich Internet Applications	If attainment % ≥ 55 and ≤ 74 then significance level is 1 if attainment % ≥ 75 and ≤ 84 then significance level is 2 If attainment % ≥ 85 significance level is 3
C423	R16CSE1136 - AD hoc and Sensor Networks	If attainment % ≥ 65 and ≤ 74 then significance level is 1 if attainment % ≥ 75 and ≤ 84 then significance level is 2 If attainment % ≥ 85 significance level is 3

Course Outcome Attainments (Direct Assessment)

Course	Subject Code & (Subject Name)	CO1	CO2	CO3	CO4	CO5	CO6	Overall Direct attainment
C111	R16HAS1101 – English	3.00	3.00	3.00	3	3	3	3.00
C112	R16MTH1101 – Mathematics - I	3	3	3	3	3	3	3.00
C113	R16EPH1101 – Engineering Physics - I	3	1.7	3	3	3	2.4	2.68
C114	R16CSE1101 – Computer Programming	2.7	3	3	3	3	3	2.95
C115	R16MED1144 – Engineering Drawing	3	3	2.5	3	3	1.5	2.67
C116	R16HAS1201 – Engineering Language & Communication Skills Lab	3	3	3	3	3	3	3.00
C117	R16CSE1201 – Computer Programming Lab	1.9	1.9	1.9	1.7	1.5	1.5	1.73
C118	R16MED1201 – Workshop Practice	3	3	3	3	3	3	3.00
C121	R16MTH1102 – Mathematics - II	3	3	3	3	3	3	3.00
C122	R16MTH1103 – Numerical Methods	3	3	3	3	3	3	3.00
C123	R16EPH1102 – Engineering Physics - II	3	3	3	3	3	3	3.00
C124	R16CSE1102 – Data Structures through ‘C’	3	3	2.1	3	2.9	3	2.83
C125	R16ECH1101 – Engineering Chemistry	3	3	3	3	3	3	3.00
C126	R16CSE1202 – Data Structures through ‘C’ Lab	2	2	2	2	2	2	2.00
C127	R16ECH1201 – Engineering Chemistry Lab	3	3	3	3	3	3	3.00
C121	R16EPH1201 – Engineering Physics II Lab	1.8	1.8	1.8	3	3	3	2.40
C211	R16MTH1105 – Probability and Statistics	3	2.2	2.3	2.6	3	2.1	2.53
C212	R16CSE1103 – Mathematical Foundations of Computer Science	3	3	1.2	3	3	3	2.70
C213	R16CSE1104 – Data Structures through C++	3	3	3	3	3	3	3.00
C214	R16ECE1136 – Digital Logic Design	3	3	1.8	3	3	1.7	2.58
C215	R16ECE1102 – Electronic Devices and Circuits	2.9	3	2.7	2.6	2.6	2.8	2.77
C216	R16EEE1130 – Basic Electrical Engineering	3	3	1.3	3	2.7	1.6	2.43
C21L7	R16EEE1212 – Electrical and Electronics Lab	3	3	3	3	3	3	3.00
C21L8	R16CSE1203 – Data Structures through C++ Lab	3	3	3	3	3	3	3.00
C221	R16CSE1105 – Computer Organization	3	3	3	3	3	2.8	2.97
C222	R16CSE1106 – Database Management Systems	3	3	2.8	3	3	3	2.97
C223	R16CSE1107 – Java Programming	3	3	3	3	3	3	3.00
C224	R16HAS1102 – Environmental Studies	2.4	2	1.9	2.7	3	1.7	2.28
C225	R16CSE1108 – Formal Languages and Automata Theory	2	1.8	2.1	1.9	2.6	2	2.07

C226	R16CSE1109 – Design and Analysis of Algorithms	3	2.3	1.5	1.9	2.4	3	2.35
C227	R16CSE1204 – Java Programming Lab	3	3	3	3	3	3	3.00
C228	R16CSE1205 – Database Management Systems Lab	3	3	3	3	3	3	3.00
C311	R16CSE1110 - Principles of Programming Languages	3	2.8	2.9	3	3	3	2.95
C312	R16HAS1105 - Human Values and Professional Ethics	3	1.1	1.1	3	3	3	2.37
C313	R16CSE1113 - Software Engineering	3	2.1	3	3	3	3	2.85
C314	R16CSE1118 - Compiler Design	1.9	2	3	3	3	3	2.65
C315	R16CSE1114 - Operating Systems	1.9	3	3	3	3	3	2.82
C316	R16CSE1139 - Computer Networks	2.8	1.4	2.6	3	3	3	2.63
C31L7	R16CSE1206 - Operating systems Lab	3	3	3	3	3	3	3.00
C31L8	R16CSE1207- Compiler Design Lab	3	3	3	3	3	3	3.00
C321	R16CSE1143 - Distributed Systems	3	3	1.6	3	3	3	2.77
C322	R16CSE1117 - Information Security	3	3	3	3	3	3	3.00
C323	R16CSE1116 -Object Oriented Analysis and Design	2.9	2.5	3	3	3	3	2.90
C324	R16CSE1121 - Software Testing Methodologies	2.2	2.1	3	3	3	3	2.72
C325	R16CSE1103 - Managerial Economics Financial Analysis	3	1.4	2	3	3	3	2.57
C326	R16CSE1119 - Web Technologies	1.8	3	2	3	3	3	2.63
C32L7	R16CSE1215 - Case Tools & Web Technologies Lab	3	3	3	3	3	3	3.00
C32L8	R16HAS1202 Advanced English language Communication Skills Lab	3	3	3	3	3	3	3.00
C411	R16CSE1120 - Linux Programming	3	3	3	3	3	3	3.00
C412	R16CSE1128 - Design Patterns	3	3	3	2.9	2.9	3	2.97
C413	R16CSE1122 - Data Warehousing and Data Mining	3	3	3	2	2	3	2.67
C414	R16CSE1125 - Cloud Computing	3	3	3	3	3	3	3.00
C415	R16CSE1127 - Mobile Computing	3	3	3	3	3	3	3.00
C416	R16CSE1112 - COMPUTER FORENSICS	3	3	3	2.4	2.2	3	2.77
C41L7	R16CSE1208 - Linux Programming lab	3	3	3	3	3	3	3.00
C41L8	R16CSE1216 - Data Warehousing and Mining LAB	3	3	3	3	3	3	3.00
C421	R16HAS1104 - Management Science	3	3	3	3	3	3	3.00
C422	R16CSE1135 - Multimedia & Rich Internet Applications	3	3	3	3	3	3	3.00
C423	R16CSE1136 - AD hoc and Sensor Networks	3	3	3	3	3	3	3.00

Course Outcome Indirect Attainments

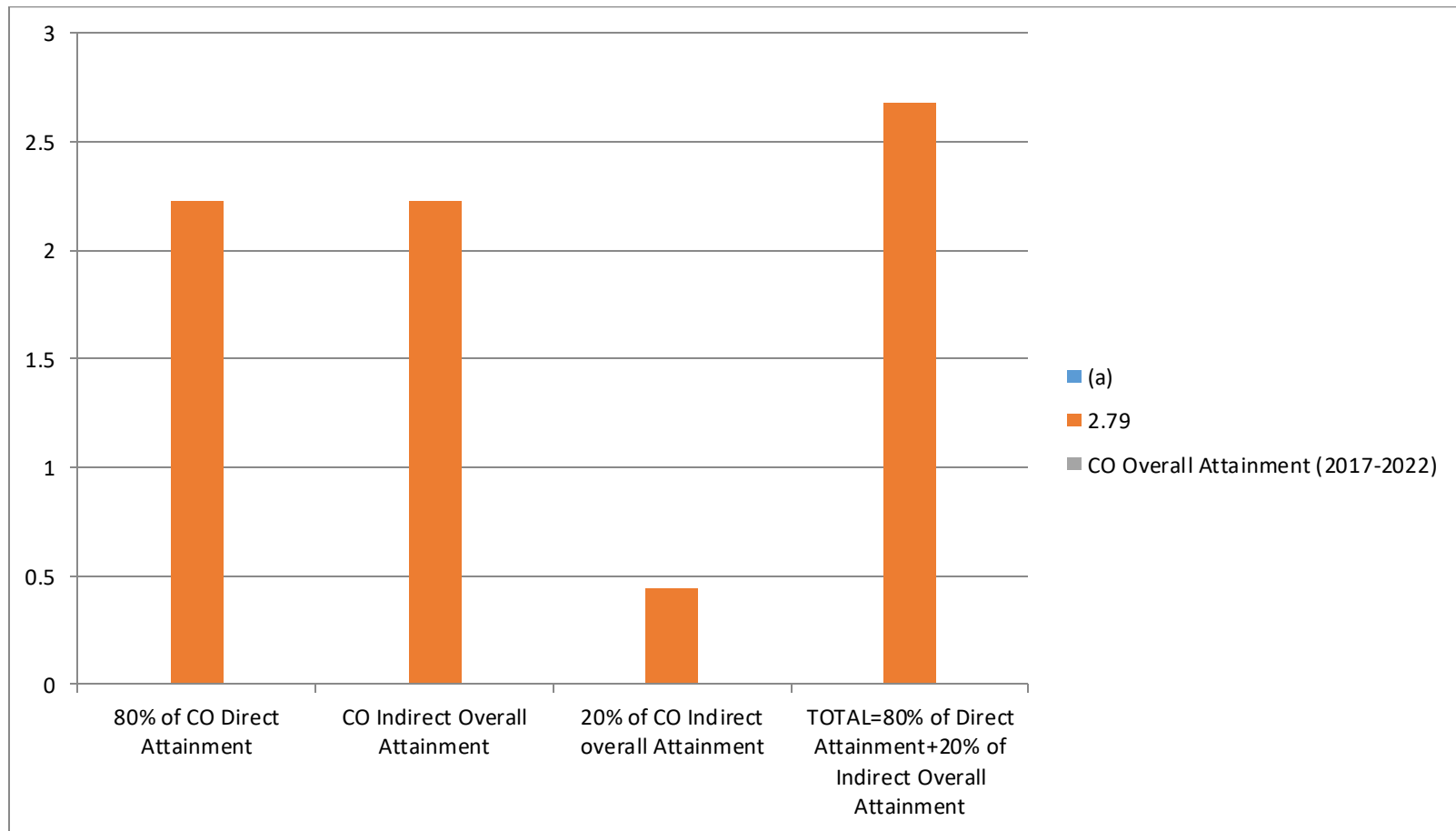
Course	Subject Code & (Subject Name)	CO1	CO2	CO3	CO4	CO5	CO6	Overall InDirect attainment
C111	R16HAS1101 – English	3	3	3	3	3	3	3.00
C112	R16MTH1101 – Mathematics - I	3	3	3	3	3	3	3.00
C113	R16EPH1101 – Engineering Physics - I	3	1.6	3	3	3	2.2	2.63
C114	R16CSE1101 – Computer Programming	2.6	3	3	3	3	3	2.93
C115	R16MED1144 – Engineering Drawing	3	3	2.7	2.8	3	1.4	2.65
C116	R16HAS1201 – Engineering Language & Communication Skills Lab	3	3	3	3	3	3	3.00
C117	R16CSE1201 – Computer Programming Lab	1	1	1	1	1	1	1.00
C118	R16MED1201 – Workshop Practice	3	3	3	3	3	3	3.00
C121	R16MTH1102 – Mathematics - II	3	3	3	3	3	3	3.00
C122	R16MTH1103 – Numerical Methods	3	3	3	3	3	3	3.00
C123	R16EPH1102 – Engineering Physics - II	3	3	3	3	3	3	3.00
C124	R16CSE1102 – Data Structures through ‘C’	3	3	3	3	3	3	3.00
C125	R16ECH1101 – Engineering Chemistry	3	3	3	3	3	3	3.00
C126	R16CSE1202 – Data Structures through ‘C’ Lab	2.7	2.6	2.7	2.9	2.7	2.6	2.70
C127	R16ECH1201 – Engineering Chemistry Lab	3	3	3	3	3	3	3.00
C121	R16EPH1201 – Engineering Physics II Lab	1.7	1.6	1.7	3	3	3	2.33
C211	R16MTH1105 – Probability and Statistics	2.3	2.1	2.3	2.3	2.5	2.7	2.37
C212	R16CSE1103 – Mathematical Foundations of Computer Science	2	1.7	3	1.3	1.2	2.2	1.90
C213	R16CSE1104 – Data Structures through C++	2.7	3	3	3	2.7	2.3	2.78
C214	R16ECE1136 – Digital Logic Design	1.1	1.1	2.3	2.8	1.3	2.2	1.80
C215	R16ECE1102 – Electronic Devices and Circuits	2.1	2.7	3	2.1	3	2.4	2.55
C216	R16EEE1130 – Basic Electrical Engineering	2	2.3	1.6	1.6	1.7	1.5	1.78
C21L7	R16EEE1212 – Electrical and Electronics Lab	1.2	1.1	1.6	1.5	1.6	1.5	1.42
C21L8	R16CSE1203 – Data Structures through C++ Lab	1.1	1.5	1.2	2.9	2.7	2.3	1.95
C221	R16CSE1105 – Computer Organization	3	2.7	2.6	3	3	2.7	2.83
C222	R16CSE1106 – Database Management Systems	1.6	2.4	2	2	1.7	1.6	1.88
C223	R16CSE1107 – Java Programming	3	3	3	2.6	2.6	3	2.87
C224	R16HAS1102 – Environmental Studies	1.5	1.2	2.5	1.3	1.3	1.6	1.57

C225	R16CSE1108 – Formal Languages and Automata Theory	2	1.7	1.6	2	2.4	3	2.12
C226	R16CSE1109 – Design and Analysis of Algorithms	2.2	3	2.7	3	2.9	3	2.80
C227	R16CSE1204 – Java Programming Lab	1.5	3	1.1	1.3	1.5	3	1.90
C228	R16CSE1205 – Database Management Systems Lab	1.2	2.7	1.5	2	1.5	1.6	1.75
C311	R16CSE1110 - Principles of Programming Languages	1.8	3	2	1.7	1.8	1.7	2.00
C312	R16HAS1105 - Human Values and Professional Ethics	1.5	1.3	1.4	2.5	1.5	3	1.87
C313	R16CSE1113 - Software Engineering	3	1.6	1.6	1.6	1.6	1.6	1.83
C314	R16CSE1118 - Compiler Design	3	1.7	3.0	1.8	1.8	1.7	2.17
C315	R16CSE1114 - Operating Systems	1.9	3	1.8	3	1.8	2.8	2.38
C316	R16CSE1139 - Computer Networks	2.1	2.3	2.1	2.9	2.1	2.1	2.27
C31L7	R16CSE1206 - Operating systems Lab	3	1.2	1.3	1.3	1.1	2.8	1.78
C31L8	R16CSE1207- Compiler Design Lab	3	1.2	1.3	1.3	1.1	2.7	1.77
C321	R16CSE1143 - Distributed Systems	2.3	2.1	1.6	2	2.2	1.7	1.98
C322	R16CSE1117 - Information Security	1.7	2.1	1.5	2.2	2.1	3	2.10
C323	R16CSE1116 -Object Oriented Analysis and Design	1.7	3	2	2.1	1.8	2.1	2.12
C324	R16CSE1121 - Software Testing Methodologies	2.1	3	1.7	1.7	3	3	2.42
C325	R16CSE1103 - Managerial Economics Financial Analysis	3	1.8	2.1	1.6	1.6	3	2.18
C326	R16CSE1119 - Web Technologies	1.2	1.2	1.3	2.7	1.2	1.2	1.47
C32L7	R16CSE1215 - Case Tools & Web Technologies Lab	3	1.2	1.3	1.3	1.1	2.7	1.77
C32L8	R16HAS1202 Advanced English language Communication Skills Lab	3	1.2	1.3	1.3	1.1	2.7	1.77
C411	R16CSE1120 - Linux Programming	1.7	2	2.2	1.6	1.3	3	1.97
C412	R16CSE1128 - Design Patterns	2.7	1.3	1.3	1.3	1.6	1.6	1.63
C413	R16CSE1122 - Data Warehousing and Data Mining	1.6	1.6	1.6	2	1.3	1.2	1.55
C414	R16CSE1125 - Cloud Computing	2.1	2.1	2.5	2.2	3	2.8	2.45
C415	R16CSE1127 - Mobile Computing	2.1	2	3	1.1	1.8	2.7	2.12
C416	R16CSE1112 - COMPUTER FORENSICS	1.8	1.8	2.6	1	3	3	2.20
C41L7	R16CSE1208 - Linux Programming lab	3	1.3	1.3	2.6	1.1	3	2.05
C41L8	R16CSE1216 - Data Warehousing and Mining LAB	1.5	1	1.2	1.2	2.8	2.4	1.68
C421	R16HAS1104 - Management Science	1.2	1.8	1.3	2	2.6	1.2	1.68
C422	R16CSE1135 - Multimedia & Rich Internet Applications	1.6	1.7	1.6	1.3	1.8	1.3	1.55
C423	R16CSE1136 - AD hoc and Sensor Networks	1.6	1.3	2.7	2.7	3	3	2.38

Overall Course Outcome Attainments

Course	Subject Code & (Subject Name)	CO Direct Overall Attainment (a)	80% of CO Direct Attainment	CO Indirect Overall Attainment (b)	20% of CO Indirect overall Attainment	TOTAL=80% of Direct Attainment + 20% of Indirect Overall Attainment
C111	R16HAS1101 – English	3.00	2.40	3.00	0.60	3
C112	R16MTH1101 – Mathematics - I	3.00	2.40	3.00	0.60	3
C113	R16EPH1101 – Engineering Physics - I	2.68	2.15	2.63	0.53	2.68
C114	R16CSE1101 – Computer Programming	2.95	2.36	2.93	0.59	2.95
C115	R16MED1144 – Engineering Drawing	2.67	2.13	2.65	0.53	2.66
C116	R16HAS1201 – Engineering Language & Communication Skills Lab	3.00	2.40	3.00	0.60	3
C117	R16CSE1201 – Computer Programming Lab	1.73	1.39	1.00	0.20	1.59
C118	R16MED1201 – Workshop Practice	3.00	2.40	3.00	0.60	3
C121	R16MTH1102 – Mathematics - II	3.00	2.40	3.00	0.60	3
C122	R16MTH1103 – Numerical Methods	3.00	2.40	3.00	0.60	3
C123	R16EPH1102 – Engineering Physics - II	3.00	2.40	3.00	0.60	3
C124	R16CSE1102 – Data Structures through ‘C’	2.83	2.27	3.00	0.60	2.87
C125	R16ECH1101 – Engineering Chemistry	3.00	2.40	3.00	0.60	3
C126	R16CSE1202 – Data Structures through ‘C’ Lab	2.00	1.60	2.70	0.54	2.14
C127	R16ECH1201 – Engineering Chemistry Lab	3.00	2.40	3.00	0.60	3
C121	R16EPH1201 – Engineering Physics II Lab	2.40	1.92	2.33	0.47	2.39
C211	R16MTH1105 – Probability and Statistics	2.53	2.03	2.37	0.47	2.5
C212	R16CSE1103 – Mathematical Foundations of Computer Science	2.70	2.16	1.90	0.38	2.54
C213	R16CSE1104 – Data Structures through C++	3.00	2.40	2.78	0.56	2.96
C214	R16ECE1136 – Digital Logic Design	2.58	2.07	1.80	0.36	2.43
C215	R16ECE1102 – Electronic Devices and Circuits	2.77	2.21	2.55	0.51	2.72
C216	R16EEE1130 – Basic Electrical Engineering	2.43	1.95	1.78	0.36	2.31
C21L7	R16EEE1212 – Electrical and Electronics Lab	3.00	2.40	1.42	0.28	2.68
C21L8	R16CSE1203 – Data Structures through C++ Lab	3.00	2.40	1.95	0.39	2.79
C221	R16CSE1105 – Computer Organization	2.97	2.37	2.83	0.57	2.94
C222	R16CSE1106 – Database Management Systems	2.97	2.37	1.88	0.38	2.75
C223	R16CSE1107 – Java Programming	3.00	2.40	2.87	0.57	2.97
C224	R16HAS1102 – Environmental Studies	2.28	1.83	1.57	0.31	2.14
C225	R16CSE1108 – Formal Languages and Automata	2.07	1.65	2.12	0.42	2.07

	Theory					
C226	R16CSE1109 – Design and Analysis of Algorithms	2.35	1.88	2.80	0.56	2.44
C227	R16CSE1204 – Java Programming Lab	3.00	2.40	1.90	0.38	2.78
C228	R16CSE1205 – Database Management Systems Lab	3.00	2.40	1.75	0.35	2.75
C311	R16CSE1110 - Principles of Programming Languages	2.95	2.36	2.00	0.40	2.76
C312	R16HAS1105 - Human Values and Professional Ethics	2.37	1.89	1.87	0.37	2.26
C313	R16CSE1113 - Software Engineering	2.85	2.28	1.83	0.37	2.65
C314	R16CSE1118 - Compiler Design	2.65	2.12	2.17	0.43	2.55
C315	R16CSE1114 - Operating Systems	2.82	2.25	2.38	0.48	2.73
C316	R16CSE1139 - Computer Networks	2.63	2.11	2.27	0.45	2.56
C31L7	R16CSE1206 - Operating systems Lab	3.00	2.40	1.78	0.36	2.76
C31L8	R16CSE1207- Compiler Design Lab	3.00	2.40	1.77	0.35	2.75
C321	R16CSE1143 - Distributed Systems	2.77	2.21	1.98	0.40	2.61
C322	R16CSE1117 - Information Security	3.00	2.40	2.10	0.42	2.82
C323	R16CSE1116 -Object Oriented Analysis and Design	2.90	2.32	2.12	0.42	2.74
C324	R16CSE1121 - Software Testing Methodologies	2.72	2.17	2.42	0.48	2.65
C325	R16CSE1103 - Managerial Economics Financial Analysis	2.57	2.05	2.18	0.44	2.49
C326	R16CSE1119 - Web Technologies	2.63	2.11	1.47	0.29	2.4
C32L7	R16CSE1215 - Case Tools & Web Technologies Lab	3.00	2.40	1.77	0.35	2.75
C32L8	R16HAS1202 Advanced English language Communication Skills Lab	3.00	2.40	1.77	0.35	2.75
C411	R16CSE1120 - Linux Programming	3.00	2.40	1.97	0.39	2.79
C412	R16CSE1128 - Design Patterns	2.97	2.37	1.63	0.33	2.7
C413	R16CSE1122 - Data Warehousing and Data Mining	2.67	2.13	1.55	0.31	2.44
C414	R16CSE1125 - Cloud Computing	3.00	2.40	2.45	0.49	2.89
C415	R16CSE1127 - Mobile Computing	3.00	2.40	2.12	0.42	2.82
C416	R16CSE1112 - COMPUTER FORENSICS	2.77	2.21	2.20	0.44	2.65
C41L7	R16CSE1208 - Linux Programming lab	3.00	2.40	2.05	0.41	2.81
C41L8	R16CSE1216 - Data Warehousing and Mining LAB	3.00	2.40	1.68	0.34	2.74
C421	R16HAS1104 - Management Science	3.00	2.40	1.68	0.34	2.74
C422	R16CSE1135 - Multimedia & Rich Internet Applications	3.00	2.40	1.55	0.31	2.71
C423	R16CSE1136 - AD hoc and Sensor Networks	3.00	2.40	2.38	0.48	2.88



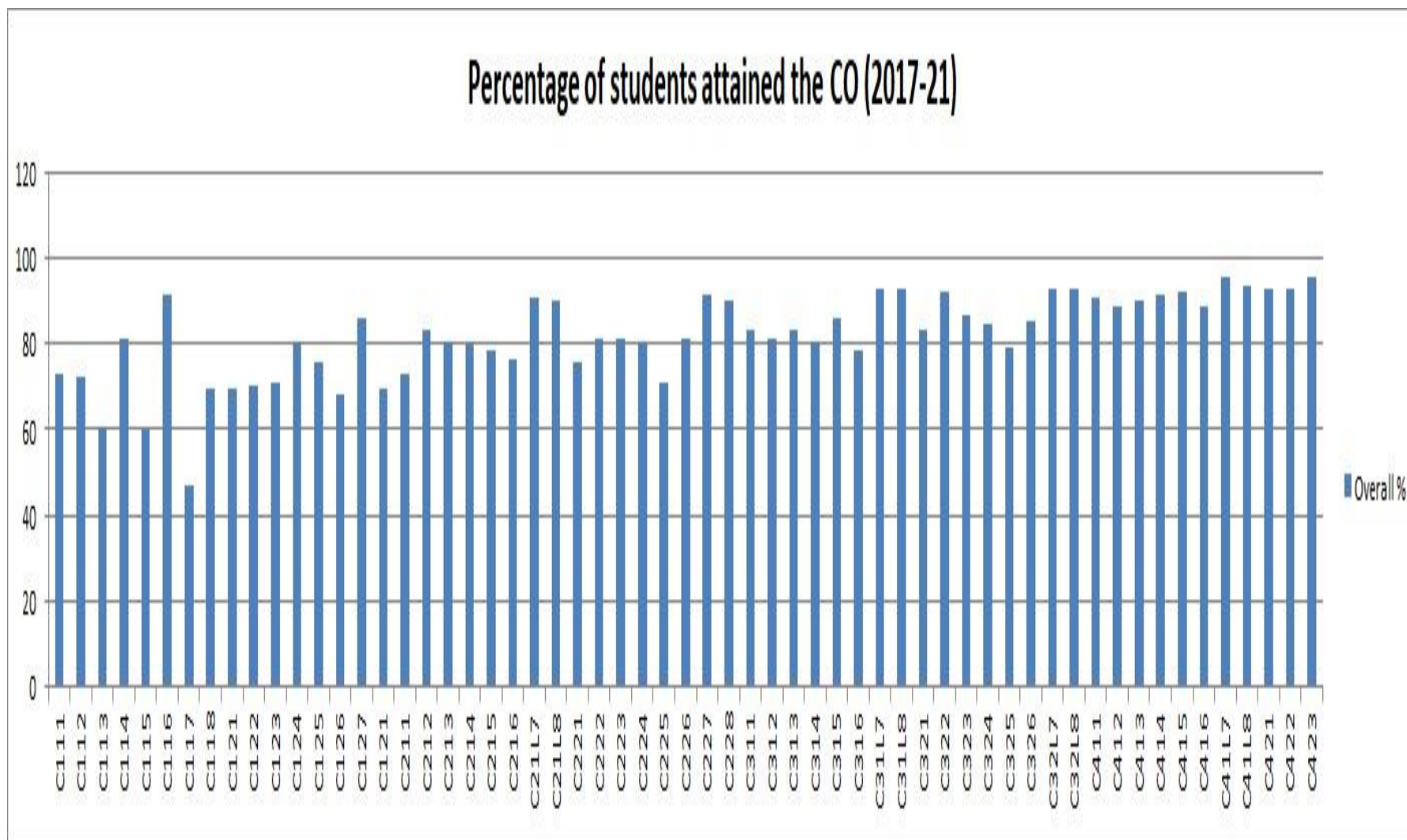
CO Overall Attainment

Percentage of students attained the CO

Course	Subject Code & (Subject Name)	CO1	CO2	CO3	CO4	CO5	CO6	Overall %
C111	R16HAS1101 – English	72.4	69.8	70.8	84.6	70.8	70.4	73.13
C112	R16MTH1101 – Mathematics - I	72.2	70.8	84.6	74.6	66.8	62.8	71.97
C113	R16EPH1101 – Engineering Physics - I	64.8	46.8	63.4	66.4	69.6	53.6	60.77
C114	R16CSE1101 – Computer Programming	56.8	98.0	87.2	73.6	87.6	84.6	81.30
C115	R16MED1144 – Engineering Drawing	69.8	64.8	55.4	59.6	66.8	44.8	60.20
C116	R16HAS1201 – Engineering Language & Communication Skills Lab	88.5	88.8	94.8	92.8	91.6	89.8	91.05
C117	R16CSE1201 – Computer Programming Lab	48.8	48.8	48.8	47.4	44.8	44.8	47.23
C118	R16MED1201 – Workshop Practice	64.8	64.8	64.8	74.2	74.8	74.8	69.70
C121	R16MTH1102 – Mathematics - II	60.8	67.8	71.8	78.2	78.8	60.8	69.70
C122	R16MTH1103 – Numerical Methods	69.8	79.2	76.8	73.8	63.8	59.8	70.53
C123	R16EPH1102 – Engineering Physics - II	75.8	77.8	67.8	76.4	63.8	64.8	71.07
C124	R16CSE1102 – Data Structures through ‘C’	83	92	75	84.4	77.4	72.6	80.73
C125	R16ECH1101 – Engineering Chemistry	90.8	74.8	64.8	69.6	87.2	68.8	76.00
C126	R16CSE1202 – Data Structures through ‘C’ Lab	69.2	71.8	64.4	66	66	70.4	67.97
C127	R16ECH1201 – Engineering Chemistry Lab	79.6	76.4	74.4	93.6	97.6	93.6	85.87
C121	R16EPH1201 – Engineering Physics II Lab	60.8	67.8	71.8	78.2	78.8	60.8	69.70
C211	R16MTH1105 – Probability and Statistics	86	63.8	66	70.8	85.4	64.4	72.73
C212	R16CSE1103 – Mathematical Foundations of Computer Science	86	85.4	66	83.8	85.2	94.4	83.47
C213	R16CSE1104 – Data Structures through C++	83	92	75	84.4	77.4	72.6	80.73
C214	R16ECE1136 – Digital Logic Design	84.6	83.6	77	81.6	78	75.6	80.07
C215	R16ECE1102 – Electronic Devices and Circuits	77.4	82.6	79	75	77.2	77.2	78.07
C216	R16EEE1130 – Basic Electrical Engineering	82.8	89.8	64	79.6	75	65.8	76.17
C21L7	R16EEE1212 – Electrical and Electronics Lab	91	90.8	91.8	90	90.2	90	90.63
C21L8	R16CSE1203 – Data Structures through C++ Lab	89.2	90	89.4	91.2	90.8	90	90.10
C221	R16CSE1105 – Computer Organization	85.0	79.0	73.2	70.8	78.8	67.8	75.77
C222	R16CSE1106 – Database Management Systems	84.4	80.4	76.4	80.4	86.2	77.2	80.83
C223	R16CSE1107 – Java Programming	78.8	80.4	78.0	82.8	82.0	84.4	81.07

C224	R16HAS1102 – Environmental Studies	81.2	77.0	80.2	82.8	85.4	74.4	80.17
C225	R16CSE1108 – Formal Languages and Automata Theory	70.0	67.8	70.0	69.2	75.6	74.0	71.10
C226	R16CSE1109 – Design and Analysis of Algorithms	87.4	79.4	72.4	78.4	78.0	92.2	81.30
C227	R16CSE1204 – Java Programming Lab	90.0	95.8	89.2	90.0	88.4	93.2	91.10
C228	R16CSE1205 – Database Management Systems Lab	91.0	94.0	91.6	88.6	87.6	87.8	90.10
C311	R16CSE1110 - Principles of Programming Languages	84	79.47	77	85.4	88.8	85.431	83.35
C312	R16HAS1105 - Human Values and Professional Ethics	88.5	63.0	64.0	91.5	86.1	92.87	81.00
C313	R16CSE1113 - Software Engineering	87.47	74.4	85	85.40	84.6	84	83.48
C314	R16CSE1118 - Compiler Design	71.6	69.43	94	87.2	79.21	82.217	80.61
C315	R16CSE1114 - Operating Systems	68.03	84.87	88	89.2	90.23	94.067	85.73
C316	R16CSE1139 - Computer Networks	79	61.4	75	85.4	86.2	84	78.50
C31L7	R16CSE1206 - Operating systems Lab	96.60	91.02	91.20	91.21	90.80	94.20	92.51
C31L8	R16CSE1207- Compiler Design Lab	96.60	91.02	91.20	91.21	90.80	94.00	92.47
C321	(R16CSE1143) - Distributed Systems	82	86	61	89.3	90	91.6	83.32
C322	(R16CSE1117) - Information Security	88	89	89.7	93.3	93	97.8	91.80
C323	(R16CSE1116) -Object Oriented Analysis and Design	77	79	82.8	92.6	93	94.2	86.43
C324	(R16CSE1121) - Software Testing Methodologies	67	69	86.8	92.4	98	94.6	84.63
C325	(R16CSE1103) - Managerial Economics Financial Analysis	81	64.8	70.2	87	79.7	91.6	79.05
C326	R16CSE1119) - Web Technologies	72	85	73.6	94.8	92	93.4	85.13
C32L7	(R16CSE1215) - Case Tools & Web Technologies Lab	96.60	91.02	91.20	91.21	90.80	94.00	92.47
C32L8	(R16HAS1202) Advanced English language Communication Skills Lab	96.60	91.02	91.20	91.21	90.80	94.00	92.47
C411	(R16CSE1120) - Linux Programming	91.84	92.40	93.60	86.07	84.60	95.80	90.72
C412	(R16CSE1128) - Design Patterns	94.8	91.6	92.4	79.4	80.8	92	88.50
C413	(R16CSE1122) - Data Warehousing and Data Mining	92.60	92.60	94.20	85.40	82.41	92.60	89.97
C414	(R16CSE1125) - Cloud Computing	91.83	92.83	95.00	84.40	86.60	95.60	91.04
C415	(R16CSE1127) - Mobile Computing	94.20	93.27	98.67	86.60	85.61	94.60	92.16
C416	(R16CSE1112) - Computer Forensics	92.80	92.00	96.40	76.60	78.60	97.07	88.91
C41L7	(R16CSE1208) - Linux Programming lab	97.00	93.61	93.63	96.20	93.27	98.40	95.35
C41L8	(R16CSE1216) - Data Warehousing and Mining LAB	93.20	92.27	92.60	92.64	95.80	95.00	93.59
C421	(R16HAS1104) - Management Science	90.80	92.03	91.80	93.20	95.60	92.40	92.64
C422	(R16CSE1135) - Multimedia & Rich Internet Applications	92.64	93.27	92.80	92.40	93.40	91.60	92.69

C423	(R16CSE1136) - AD hoc and Sensor Networks	93.40	92.80	95.60	95.60	97.80	98.60	95.63
------	---	-------	-------	-------	-------	-------	-------	-------



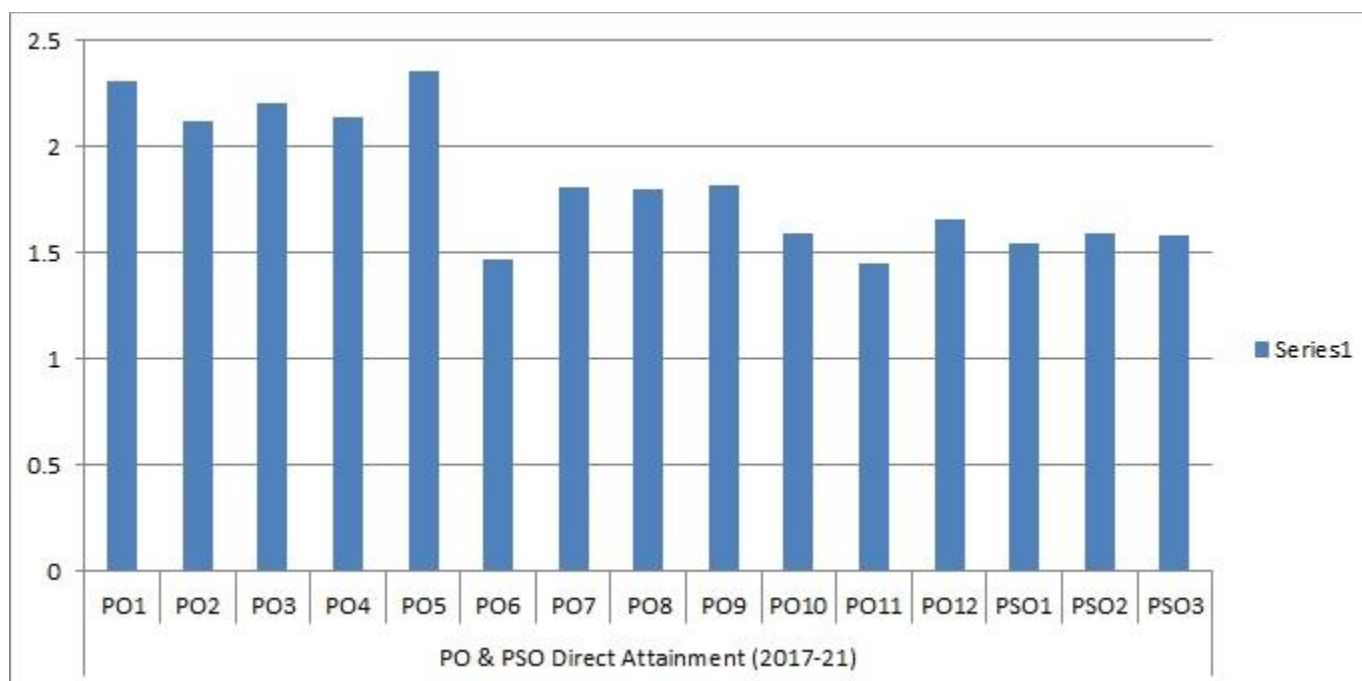
PO & PSO Direct Attainment

Y/S	Subject Code & Subject Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	R16HAS1101 – English	-	-	1.97	1.18	1.18	1.97	1.18	1.18	1.18	1.97	-	1.97	-	-	-
	R16MTH1101 – Mathematics - I	1.9	2.3	2.3	2.3	1.15	1.15	-	-	-	-	-	0.76	2.3	0.76	2.3
	R16EPH1101 – Engineering Physics - I	1.13	2.27	1.09	2.23	2.25	-	-	-	-	-	-	1.4	-	2.2	0.75
	R16CSE1101 – Computer Programming	2.76	2.77	2.77	1.39	1.84	0.45	-	-	-	-	-	1.39	0.46	1.38	0.46
	R16MED1144 – Engineering Drawing	2.07	0.44	0.44	0.44	0.44	0.44	-	1.34	0.44	0.44	-	-	0.44	-	-
	R16HAS1201 – Engineering Language & Communication Skills Lab	2.51	0.84	2.51	0.42	2.51	0.42	-	0.42	0.42	0.42	0.42	0.42	2.09	1.76	1.26
	R16CSE1201 – Computer Programming Lab	3	3	-	1.5	3	-	-	-	-	-	-	-	0.5	1.5	0.5
	R16MED1201 – Workshop Practice	1.15	1.15	1.15	0.38	1.15	-	-	1.15	-	-	0.77	-	1.15	-	1.15
II	R16MTH1102 – Mathematics - II	2.09	2.59	2.59	2.59	2.59	0.41	-	-	-	-	0.41	1.25	2.09	0.83	2.09
	R16MTH1103 – Numerical Methods	1.81	2.26	2.72	2.72	1.36	0.45	-	-	-	-	0.45	1.36	2.72	2.72	2.72
	R16EPH1102 – Engineering Physics - II	1.22	2.03	2.44	2.44	2.03	-	1.22	-	-	-	-	2.44	-	2.44	2.03
	R16CSE1102 – Data Structures through 'C'	2.09	2.51	2.51	1.25	1.67	-	-	-	-	-	-	1.25	0.41	1.25	0.41
	R16ECH1101 – Engineering Chemistry	2.44	2.44	2.03	-	-	-	1.4	-	-	-	-	-	1.22	1.22	-
	R16CSE1202 – Data Structures through 'C' Lab	3	3	3	1.5	3	-	-	-	-	-	1.5	-	0.5	1.5	0.5
	R16ECH1201 – Engineering Chemistry Lab	2.37	1.58	-	-	-	9.48	1.19	-	1.19	-	-	1.19	1.19	1.19	-
	R16EPH1201 – Engineering Physics II Lab	0.83	0.8	1.64	0.55	1.61	-	0.9	-	-	-	-	0.55	1.39	1.73	-
III	R16MTH1105 – Probability and Statistics	2.13	2.6	2.59	2.19	1.28	-	-	-	-	-	-	1.28	-	0.42	0.42
	R16CSE1103 – Mathematical Foundations of Computer Science	2.26	1.7	1.84	1.42	2.23	-	-	-	-	-	-	-	0.38	-	0.38
	R16CSE1104 – Data Structures through C++	2.44	2.44	2.44	1.22	2.03	-	-	-	-	-	1.22	-	1.22	0.4	0.4

	R16ECE1136 – Digital Logic Design	3.13	2.52	2.53	5.29	2.49	-	-	-	2.11	0.6	-	-	0.6	0.69	1.04
	R16ECE1102 – Electronic Devices and Circuits	2.16	2.56	1.28	1.3	2.57	-	-	-	0.42	0.42	0.43	-	1.3	0.87	1.28
	R16EEE1130 – Basic Electrical Engineering	2.02	2.12	1.24	1.27	2.49	-	-	-	-	0.41	-	-	0.81	0.81	1.29
	R16EEE1212 – Electrical and Electronics Lab	2.49	1.49	1.5	2.98	2.48	-	-	-	-	-	1.49	-	2.98	2.97	0.99
	R16CSE1203 – Data Structures through C++ Lab	3	2.5	2.5	1	2.5	-	-	-	-	-	-	-	1	1.5	0.33
=====	R16CSE1105 – Computer Organization	2.58	2.57	2.13	1.72	1.71	-	-	-	-	-	1.27	0.42	0.43	0.42	0.42
	R16CSE1106 – Database Management Systems	2.91	2.44	2.42	2.39	1.43	-	-	-	0.96	1.45	0.95	0.96	0.96	2.42	0.87
	R16CSE1107 – Java Programming	2.15	0.86	0.86	2.58	1.29	-	-	-	0.86	1.29	1.29	0.86	1.29	1.29	1.72
	R16HAS1102 – Environmental Studies	2.07	2.13	1.31	2.16	2.58	0.85	0.83	-	-	1.27	1.27	0.84	1.24	1.28	0
	R16CSE1108 – Formal Languages and Automata Theory	2.5	2.08	1.26	2.52	2.56	-	-	-	1.26	0.83	0.83	0.85	1.26	1.25	0.42
	R16CSE1109 – Design and Analysis of Algorithms	1.37	1.31	1.31	0.88	-	-	-	-	-	-	-	0.88	1.34	0.87	0.77
	R16CSE1204 – Java Programming Lab	0.99	0.99	-	1.99	0.99	-	-	-	-	1	-	-	1	0.49	0.99
	R16CSE1205 – Database Management Systems Lab	2	1.5	1.5	-	2.5	-	-	-	-	1	0.5	0.5	2.5	2	2
=====	R16CSE1110 - Principles of Programming Languages	1.95	2.35	2.35	1.92	1.94	-	-	-	-	-	-	-	-	0.39	-
	R16HAS1105 - Human Values and Professional Ethics	2.16	2.7	1.29	0.93	0.44	0.95	0.95	2.66	0.47	0.95	-	-	-	-	-
	R16CSE1113 - Software Engineering	2.48	2.16	2.59	1.31	2.16	-	-	-	1.32	1.31	0.43	0.43	-	0.43	1.21
	R16CSE1118 - Compiler Design	2.22	2.16	2.16	1.33	1.35	-	-	-	-	0.46	0.46	-	0.46	-	-
	R16CSE1114 - Operating Systems	2.24	1.86	1.8	-	1.83	-	-	-	0.38	0.38	-	-	0.38	-	0.38
	R16CSE1139 - Computer Networks	2.09	2.52	2.52	1.3	2.12	-	-	-	-	-	-	-	-	0.44	0.4
	R16CSE1206 - Operating systems Lab	2.15	1.29	1.29	1.29	2.58	-	-	-	-	-	-	-	1.29	-	0.86
	R16CSE1207- Compiler Design Lab	2.5	1.5	1.5	3	2.5	-	-	-	1	-	-	0.5	0.5	-	-

III - - -	(R16CSE1143) - Distributed Systems	2.25	2.29	2.79	1.75	2.79	-	-	-	-	0.79	-	-	0.46	-	-
	(R16CSE1117) - Information Security	1.81	1.36	2.26	-	1.36	0.45	-	-	-	-	-	0.9	0.9	-	-
	(R16CSE1116) -Object Oriented Analysis and Design	2.17	0.87	0.87	1.32	2.18	-	-	-	-	-	-	-	-	0.44	-
	(R16CSE1121) - Software Testing Methodologies	2.18	0.87	0.86	1.36	2.22	-	-	-	0.9	0.9	0.9	-	-	0.41	-
	(R16CSE1103) - Managerial Economics Financial Analysis	2.26	2.33	2.38	1.3	-	-	-	-	-	0.9	-	-	-	-	-
	R16CSE1119) - Web Technologies	2.3	2.31	2.32	1.38	1.38	-	-	-	0.92	0.92	0.93	-	0.46	-	0.45
	(R16CSE1215) - Case Tools & Web Technologies Lab	2.48	2.48	2.5	1.5	2.47	-	-	-	1	1	1	1	1	-	0.66
	(R16HAS1202) Advanced English language Communication Skills Lab	2.5	2.41	2.41	-	-	-	-	-	0.98	1	1.5	1.5	-	-	-
IV - - -	(R16CSE1120) - Linux Programming	1.68	1.68	1.68	1.34	2.02	-	-	-	-	-	0.33	-	1.01	1.01	-
	(R16CSE1128) - Design Patterns	1.72	2.62	2.61	0.85	1.73	-	-	-	-	-	0.44	-	0.42	1.32	0.44
	(R16CSE1122) - Data Warehousing and Data Mining	1.45	2.39	2.88	2.44	2.9	-	-	-	-	-	0.48	0.48	1.43	1.45	0.48
	(R16CSE1125) - Cloud Computing	2.43	0.96	2.44	2.43	1.46	-	-	-	-	0.48	-	0.48	1.46	1.46	0.81
	(R16CSE1127) - Mobile Computing	2.15	2.15	2.15	2.15	2.58	0.43	-	-	-	0.43	-	0.43	1.29	0.86	0.43
	(R16CSE1112) - COMPUTER FORENSICS	0.93	1.39	2.31	1.85	0.93	0.46	-	-	-	-	-	-	0.92	1.38	0.46
	(R16CSE1208) - Linux Programming lab	1.29	1.29	1.29	2.58	1.72	-	-	-	-	-	1.29	1.29	1.29	1.29	0.86
	(R16CSE1216) - Data Warehousing and Mining LAB	3	2.5	2.5	2.5	3	-	-	-	-	-	-	1.5	1.5	1	0.33
V - - -	(R16HAS1104) - Management Science	-	2.86	1.43	2.86	-	1.43	-	-	-	-	-	-	-	-	0.47
	(R16CSE1135) - Multimedia & Rich Internet Applications	2.93	2.44	2.93	0.97	2.44	-	-	-	-	1.46	-	-	0.48	1.46	0.48
	(R16CSE1136) - AD hoc and Sensor Networks	2.51	2.51	2.09	1.25	2.51	-	-	-	-	-	-	0.41	-	1.25	0.41
PO	Curriculum attainment average	2.15	2.00	2.00	1.75	1.99	1.38	1.10	1.35	0.93	0.88	0.86	0.98	1.11	1.23	0.85

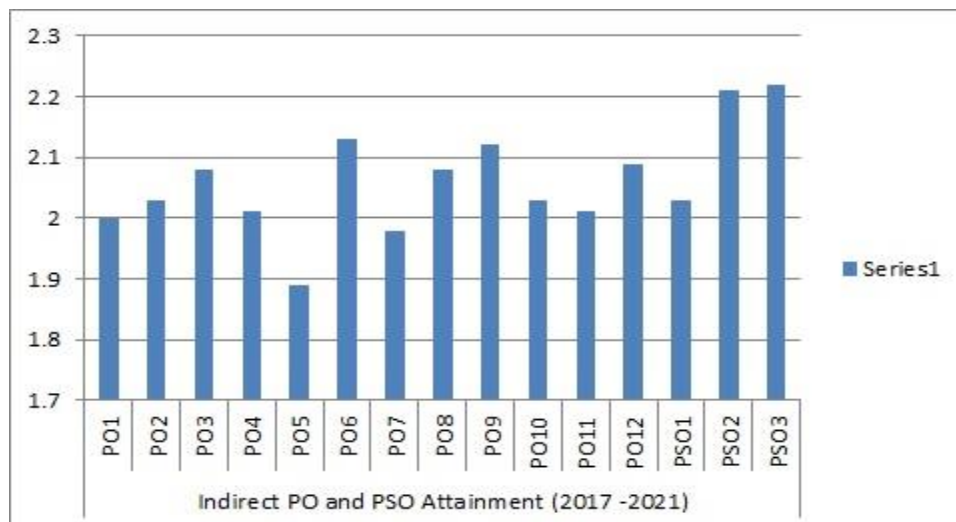
	No. of courses mapped	57	58	57	54	53	14	7	5	17	25	24	31	46	45	44
	Curriculum average mapping	2.31	2.12	2.21	2.14	2.36	1.47	1.81	1.80	1.82	1.59	1.45	1.66	1.55	1.59	1.58



Indirect PO and PSO Attainment

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Alumni Survey	2.39	2.49	2.34	2.37	2.17	2.10	2.49	2.45	2.35	2.35	2.37	2.19	2.44	2.68	2.54
Exit Survey	2.21	2.19	2.24	2.01	2.34	2.07	1.84	2.10	2.27	2.19	2.22	1.82	2.09	2.37	2.25
Employer Survey	1.27	1.33	1.47	1.53	1.30	1.73	1.43	1.57	1.87	1.53	1.50	1.97	1.43	1.83	1.73

Parent Feedback Survey	1.85	1.95	2.05	1.95	1.83	2.08	1.95	2.20	2.10	1.88	1.95	1.98	1.90	1.98	2.05
Professional Society Member	2.30	2.20	2.30	2.20	1.80	2.70	2.20	2.10	2.00	2.20	2.00	2.50	2.30	2.20	2.50
Indirect Attainment	2.00	2.03	2.08	2.01	1.89	2.13	1.98	2.08	2.12	2.03	2.01	2.09	2.03	2.21	2.22



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

2017-21 CO CIE Attainment

S.No	Course Title	Course Code	CO1	CO2	CO3	CO4	CO5	CO6	Overall CIE Attainment
1	English	R16HAS1101	3	3	3	3	3	3	3
2	Mathematics –I	R16MTH1101	3	2	3	3	2	1	2.3
3	Engineering Physics –I	R16EPH1101	3	3	3	3	3	3	3
4	Computer Programming	R16CSE1101	3	3	3	3	3	3	3
5	Engineering Drawing	R16MED1144	3	3	3	3	3	2	2.8
6	English Language & Communication Skills Lab	R16HAS1201	3	3	3	3	3	3	3
7	Computer Programming Lab	R16CSE1201	3	3	3	3	3	3	3
8	Workshop practice	R16MED1201	3	3	3	3	3	3	3
9	Mathematics –II	R16MTH1102	3	1	1	2	3	3	2.2
10	Numerical Methods	R16MTH1103	3	3	3	3	3	3	3
11	Engineering Physics –II	R16EPH1102	3	3	3	3	3	3	3
12	Data Structures Through ‘C’	R16CSE1102	3	3	3	3	3	3	3
13	Engineering Chemistry	R16ECH1101	3	3	3	3	3	3	3
14	Data Structures Through ‘C’ Lab	R16CSE1202	3	3	3	3	3	3	3

15	Engineering Chemistry Lab	R16ECH1201	3	3	3	3	3	3	3
16	Engineering Physics – II Lab	R16EPH1201	3	3	3	3	3	3	3
17	Mathematics – III	R16MTH1104	3	2	3	3	3	3	2.8
18	Probability Theory and Stochastic Processes	R16ECE1101	3	3	3	3	3	3	3
19	Switching Theory and Logic Design	R16ECE1106	3	3	2	3	3	3	2.8
20	Electrical Circuits	R16EEE1101	3	3	2	3	3	3	2.8
21	Electronic Devices and Circuits	R16ECE1102	3	3	3	3	2	3	2.8
22	Signals and Systems	R16ECE1103	3	3	3	3	3	3	3
23	Electronic Devices and Circuits Lab.	R16ECE1201	3	3	3	3	3	3	3
24	Basic Simulation Lab.	R16ECE1202	3	3	3	3	3	3	3
25	Principles of Electrical Engineering	R16EEE1129	3	3	2	3	3	3	2.8
26	Electronic Circuit Analysis	R16ECE1104	3	3	3	3	3	3	3
27	Pulse and Digital Circuits	R16ECE1105	3	2	3	3	3	3	2.8
28	Environmental Studies	R16HAS1102	2	3	3	3	3	3	2.8
29	Electromagnetic Theory and Transmission Lines	R16ECE1107	3	3	3	3	3	3	3
30	Digital Design using Verilog HDL	R16ECE1132	2	3	3	3	3	3	2.8
31	Electrical Technology Lab.	R16EEE1213	3	3	3	3	3	3	3
32	Electronic Circuits and Pulse Circuits Lab.	R16ECE1204	3	3	3	3	3	3	3

33	Control Systems Engineering	R16EEE1114	3	3	3	3	3	3	3
34	Computer Organization and Operating Systems	R16CSE1111	3	3	3	3	3	3	3
35	Antennas and Wave Propagation	R16ECE1108	3	3	3	3	3	3	3
36	Computer Networks	R16CSE1139	3	3	3	3	3	3	3
37	Analog Communications	R16ECE1110	3	3	3	3	3	3	3
38	Linear and Digital IC Applications	R16ECE1111	3	3	3	3	3	3	3
39	Analog Communications Lab.	R16ECE1205	3	3	3	3	3	3	3
40	IC Applications and HDL Simulation Lab	R16ECE1206	2	2	2	2	2	2	2
41	Managerial Economics and Financial Analysis	R16HAS1103	3	3	3	3	3	3	3
42	Television Engineering	R16ECE1122	3	3	3	3	3	3	3
43	Digital Communications	R16ECE1112	3	3	3	3	3	3	3
44	VLSI Design	R16ECE1115	3	3	3	2	3	3	2.8
45	Microprocessors and Microcontrollers	R16ECE1113	3	3	3	3	3	3	3
46	Digital Signal Processing	R16ECE1114	3	3	3	3	3	3	3
47	Microprocessors and Microcontrollers Lab	R16ECE1207	2	2	2	2	1	2	1.8
48	Digital Signal Processing Lab	R16ECE1208	2	3	2	3	3	3	2.7
49	Management Science	R16HAS1104	3	3	3	3	3	3	3
50	Microwave Engineering	R16ECE1116	3	3	3	3	3	3	3
51	Embedded Systems Design	R16ECE1121	3	3	3	3	3	3	3

52	Cellular and Mobile Communications	R16ECE1124	3	3	3	3	3	3	3
53	Digital Image Processing	R16ECE1119	3	3	3	3	3	3	3
54	Optical Communications	R16ECE1120	3	3	3	3	3	2	2.8
55	Advanced English Language Communication Skills Lab	R16HAS1202	3	3	3	3	3	3	3
56	Microwave Engineering and Digital Communications Lab	R16ECE1210	3	3	3	3	3	3	3
57	Satellite Communications	R16ECE1125	3	3	3	3	3	3	3
58	Radar Systems	R16ECE1128	3	3	3	3	3	3	3
59	Wireless Communications and Networks	R16ECE1131	3	3	3	3	3	3	3

2017-21 CO SEE Attainment

S.No	Course Title	Course Code	CO1	CO2	CO3	CO4	CO5	CO6	Overall CIE Attainment
1	English	R16HAS1101	2.7	2.7	2.7	2.7	2.7	2.7	2.7
2	Mathematics –I	R16MTH1101	1.8	1.8	1.8	1.8	1.8	1.8	1.8
3	Engineering Physics –I	R16EPH1101	2.5	2.5	2.5	2.5	2.5	2.5	2.5
4	Computer Programming	R16CSE1101	2.2	2.2	2.2	2.2	2.2	2.2	2.2
5	Engineering Drawing	R16MED1144	2.6	2.6	2.6	2.6	2.6	2.6	2.6
6	English Language & Communication Skills Lab	R16HAS1201	2.4	2.4	2.4	2.4	2.4	2.4	2.4
7	Computer Programming Lab	R16CSE1201	2.7	2.7	2.7	2.7	2.7	2.7	2.7
8	Workshop practice	R16MED1201	1.9	1.9	1.9	1.9	1.9	1.9	1.9

9	Mathematics –II	R16MTH1102	2.4	2.4	2.4	2.4	2.4	2.4	2.4
10	Numerical Methods	R16MTH1103	2.5	2.5	2.5	2.5	2.5	2.5	2.5
11	Engineering Physics –II	R16EPH1102	2.4	2.4	2.4	2.4	2.4	2.4	2.4
12	Data Structures Through ‘C’	R16CSE1102	2.5	2.5	2.5	2.5	2.5	2.5	2.5
13	Engineering Chemistry	R16ECH1101	2.3	2.3	2.3	2.3	2.3	2.3	2.3
14	Data Structures Through ‘C’ Lab	R16CSE1202	2.8	2.8	2.8	2.8	2.8	2.8	2.8
15	Engineering Chemistry Lab	R16ECH1201	2.3	2.3	2.3	2.3	2.3	2.3	2.3
16	Engineering Physics – II Lab	R16EPH1201	2	2	2	2	2	2	2
17	Mathematics – III	R16MTH1104	2	2	2	2	2	2	2
18	Probability Theory and Stochastic Processes	R16ECE1101	2	2	2	2	2	2	2
19	Switching Theory and Logic Design	R16ECE1106	1.8	1.8	1.8	1.8	1.8	1.8	1.8
20	Electrical Circuits	R16EEE1101	2.2	2.2	2.2	2.2	2.2	2.2	2.2
21	Electronic Devices and Circuits	R16ECE1102	2.5	2.5	2.5	2.5	2.5	2.5	2.5
22	Signals and Systems	R16ECE1103	2.3	2.3	2.3	2.3	2.3	2.3	2.3
23	Electronic Devices and Circuits Lab.	R16ECE1201	2.4	2.4	2.4	2.4	2.4	2.4	2.4
24	Basic Simulation Lab.	R16ECE1202	2.4	2.4	2.4	2.4	2.4	2.4	2.4
25	Principles of Electrical Engineering	R16EEE1129	2.1	2.1	2.1	2.1	2.1	2.1	2.1
26	Electronic Circuit Analysis	R16ECE1104	2	2	2	2	2	2	2

27	Pulse and Digital Circuits	R16ECE1105	2.6	2.6	2.6	2.6	2.6	2.6	2.6
28	Environmental Studies	R16HAS1102	1.9	1.9	1.9	1.9	1.9	1.9	1.9
29	Electromagnetic Theory and Transmission Lines	R16ECE1107	1.8	1.8	1.8	1.8	1.8	1.8	1.8
30	Digital Design using Verilog HDL	R16ECE1132	2.1	2.1	2.1	2.1	2.1	2.1	2.1
31	Electrical Technology Lab.	R16EEE1213	2.4	2.4	2.4	2.4	2.4	2.4	2.4
32	Electronic Circuits and Pulse Circuits Lab.	R16ECE1204	2.5	2.5	2.5	2.5	2.5	2.5	2.5
33	Control Systems Engineering	R16EEE1114	2.3	2.3	2.3	2.3	2.3	2.3	2.3
34	Computer Organization and Operating Systems	R16CSE1111	2.2	2.2	2.2	2.2	2.2	2.2	2.2
35	Antennas and Wave Propagation	R16ECE1108	1.6	1.6	1.6	1.6	1.6	1.6	1.6
36	Computer Networks	R16CSE1139	2.1	2.1	2.1	2.1	2.1	2.1	2.1
37	Analog Communications	R16ECE1110	2.3	2.3	2.3	2.3	2.3	2.3	2.3
38	Linear and Digital IC Applications	R16ECE1111	2	2	2	2	2	2	2
39	Analog Communications Lab.	R16ECE1205	2.7	2.7	2.7	2.7	2.7	2.7	2.7
40	IC Applications and HDL Simulation Lab	R16ECE1206	2.4	2.4	2.4	2.4	2.4	2.4	2.4
41	Managerial Economics and Financial Analysis	R16HAS1103	1.9	1.9	1.9	1.9	1.9	1.9	1.9
42	Television Engineering	R16ECE1122	2.1	2.1	2.1	2.1	2.1	2.1	2.1

43	Digital Communications	R16ECE1112	2.3	2.3	2.3	2.3	2.3	2.3	2.3
44	VLSI Design	R16ECE1115	2.1	2.1	2.1	2.1	2.1	2.1	2.1
45	Microprocessors and Microcontrollers	R16ECE1113	2.6	2.6	2.6	2.6	2.6	2.6	2.6
46	Digital Signal Processing	R16ECE1114	2.6	2.6	2.6	2.6	2.6	2.6	2.6
47	Microprocessors and Microcontrollers Lab	R16ECE1207	1.93	1.93	1.93	1.93	1.93	1.93	1.9
48	Digital Signal Processing Lab	R16ECE1208	2.3	2.3	2.3	2.3	2.3	2.3	2.3
49	Management Science	R16HAS1104	1	1	1	1	1	1	1
50	Microwave Engineering	R16ECE1116	1.6	1.6	1.6	1.6	1.6	1.6	1.6
51	Embedded Systems Design	R16ECE1121	2.5	2.5	2.5	2.5	2.5	2.5	2.5
52	Cellular and Mobile Communications	R16ECE1124	1.5	1.5	1.5	1.5	1.5	1.5	1.5
53	Digital Image Processing	R16ECE1119	2.7	2.7	2.7	2.7	2.7	2.7	2.7
54	Optical Communications	R16ECE1120	1.5	1.5	1.5	1.5	1.5	1.5	1.5
55	Advanced English Language Communication Skills Lab	R16HAS1202	1.8	1.8	1.8	1.8	1.8	1.8	1.8
56	Microwave Engineering and Digital Communications Lab	R16ECE1210	2.2	2.2	2.2	2.2	2.2	2.2	2.2
57	Satellite Communications	R16ECE1125	2.4	2.4	2.4	2.4	2.4	2.4	2.4

58	Radar Systems	R16ECE1128	2.8	2.8	2.8	2.8	2.8	2.8	2.8
59	Wireless Communications and Networks	R16ECE1131	1.9	1.9	1.9	1.9	1.9	1.9	1.9

2017-21 CO Rubrics		
Course Title	Course Code	Rubrics
English	R16HAS1101	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Mathematics –I	R16MTH1101	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Engineering Physics –I	R16EPH1101	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Computer Programming	R16CSE1101	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Engineering Drawing	R16MED1144	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
English Language & Communication Skills Lab	R16HAS1201	if attainment % ≥ 50 and ≤ 59 then significance level is 1
		if attainment % ≥ 60 and ≤ 69 then significance level is 2
		if attainment % ≥ 70 significance level is 3

Computer Programming Lab	R16CSE1201	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Workshop practice	R16MED1201	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Mathematics –II	R16MTH1102	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Numerical Methods	R16MTH1103	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Engineering Physics –II	R16EPH1102	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Data Structures Through ‘C’	R16CSE1102	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Engineering Chemistry	R16ECH1101	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Data Structures Through ‘C’ Lab	R16CSE1202	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Engineering Chemistry Lab	R16ECH1201	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Engineering Physics – II	R16EPH1201	if attainment % ≥ 40 and ≤ 49 then significance level is 1

Lab		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Mathematics – III	R16MTH1104	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Probability Theory and Stochastic Processes	R16ECE1101	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Switching Theory and Logic Design	R16ECE1106	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Electrical Circuits	R16EEE1101	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Electronic Devices and Circuits	R16ECE1102	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Signals and Systems	R16ECE1103	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Electronic Devices and Circuits Lab.	R16ECE1201	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Basic Simulation Lab.	R16ECE1202	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Principles of Electrical Engineering	R16EEE1129	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2

		if attainment % ≥ 60 significance level is 3
Electronic Circuit Analysis	R16ECE1104	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Pulse and Digital Circuits	R16ECE1105	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Environmental Studies	R16HAS1102	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Electromagnetic Theory and Transmission Lines	R16ECE1107	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Digital Design using Verilog HDL	R16ECE1132	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Electrical Technology Lab.	R16EEE1213	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Electronic Circuits and Pulse Circuits Lab.	R16ECE1204	if attainment % ≥ 50 and ≤ 59 then significance level is 1
		if attainment % ≥ 60 and ≤ 69 then significance level is 2
		if attainment % ≥ 70 significance level is 3
Control Systems Engineering	R16EEE1114	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Computer Organization and Operating Systems	R16CSE1111	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3

Antennas and Wave Propagation	R16ECE1108	if attainment % ≥ 50 and ≤ 59 then significance level is 1
		if attainment % ≥ 60 and ≤ 69 then significance level is 2
		if attainment % ≥ 70 significance level is 3
Computer Networks	R16CSE1139	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Analog Communications	R16ECE1110	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Linear and Digital IC Applications	R16ECE1111	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Analog Communications Lab.	R16ECE1205	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
IC Applications and HDL Simulation Lab	R16ECE1206	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Managerial Economics and Financial Analysis	R16HAS1103	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Television Engineering	R16ECE1122	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Digital Communications	R16ECE1112	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
VLSI Design	R16ECE1115	if attainment % ≥ 40 and ≤ 49 then significance level is 1

		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Microprocessors and Microcontrollers	R16ECE1113	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Digital Signal Processing	R16ECE1114	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Microprocessors and Microcontrollers Lab	R16ECE1207	if attainment % ≥ 50 and ≤ 59 then significance level is 1
		if attainment % ≥ 60 and ≤ 69 then significance level is 2
		if attainment % ≥ 70 significance level is 3
Digital Signal Processing Lab	R16ECE1208	if attainment % ≥ 50 and ≤ 59 then significance level is 1
		if attainment % ≥ 60 and ≤ 69 then significance level is 2
		if attainment % ≥ 70 significance level is 3
Management Science	R16HAS1104	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Microwave Engineering	R16ECE1116	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Embedded Systems Design	R16ECE1121	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Cellular and Mobile Communications	R16ECE1124	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2
		if attainment % ≥ 60 significance level is 3
Digital Image Processing	R16ECE1119	if attainment % ≥ 40 and ≤ 49 then significance level is 1
		if attainment % ≥ 50 and ≤ 59 then significance level is 2

[illegible]

[illegible]

2017-21 CO Indirect Attainment									
S.No	Course Title	Course Code	CO1	CO2	CO3	CO4	CO5	CO6	Overall Attainment
1	English	R16HAS1101	2.31	2.25	2.26	2.31	2.22	2.28	2.27
2	Mathematics –I	R16MTH1101	2.26	2.29	2.21	2.29	2.32	2.28	2.27
3	Engineering Physics –I	R16EPH1101	2.28	2.30	2.33	2.32	2.32	2.26	2.30
4	Computer Programming	R16CSE1101	2.29	2.30	2.21	2.16	2.28	2.25	2.25
5	Engineering Drawing	R16MED1144	2.30	2.17	2.35	2.26	2.27	2.25	2.27
6	English Language & Communication Skills Lab	R16HAS1201	2.27	2.20	2.16	2.16	2.16	2.17	2.19
7	Computer Programming Lab	R16CSE1201	2.21	2.26	2.26	2.25	2.26	2.21	2.24
8	Workshop practice	R16MED1201	2.25	2.26	2.26	2.21	2.27	2.21	2.24
9	Mathematics –II	R16MTH1102	2.19	2.24	2.22	2.24	2.20	2.30	2.23
10	Numerical Methods	R16MTH1103	2.25	2.30	2.24	2.24	2.18	2.24	2.24
11	Engineering Physics –II	R16EPH1102	2.17	2.30	2.27	2.36	2.30	2.25	2.28
12	Data Structures Through ‘C’	R16CSE1102	2.25	2.19	2.17	2.10	2.09	2.18	2.16
13	Engineering Chemistry	R16ECH1101	2.29	2.25	2.22	2.14	2.31	2.22	2.24
14	Data Structures Through ‘C’ Lab	R16CSE1202	2.19	2.25	2.24	2.27	2.33	2.22	2.25
15	Engineering Chemistry Lab	R16ECH1201	2.22	2.15	2.22	2.26	2.17	2.22	2.21
16	Engineering Physics – II Lab	R16EPH1201	2.15	2.32	2.28	2.22	2.19	2.23	2.23
17	Mathematics – III	R16MTH1104	2.38	2.22	2.37	2.44	2.35	2.24	2.33
18	Probability Theory and Stochastic Processes	R16ECE1101	2.22	2.24	2.27	2.39	2.29	2.33	2.29

19	Switching Theory and Logic Design	R16ECE1106	2.30	2.33	2.41	2.34	2.43	2.25	2.34
20	Electrical Circuits	R16EEE1101	2.21	2.26	2.35	2.33	2.26	2.32	2.29
21	Electronic Devices and Circuits	R16ECE1102	2.34	2.31	2.30	2.35	2.41	2.46	2.36
22	Signals and Systems	R16ECE1103	2.28	2.27	2.29	2.24	2.24	2.32	2.27
23	Electronic Devices and Circuits Lab.	R16ECE1201	2.22	2.34	2.29	2.31	2.29	2.43	2.31
24	Basic Simulation Lab.	R16ECE1202	2.33	2.32	2.45	2.37	2.48	2.31	2.38
25	Principles of Electrical Engineering	R16EEE1129	2.41	2.28	2.26	2.37	2.31	2.24	2.31
26	Electronic Circuit Analysis	R16ECE1104	2.35	2.30	2.24	2.28	2.30	2.24	2.28
27	Pulse and Digital Circuits	R16ECE1105	2.36	2.28	2.32	2.30	2.27	2.36	2.32
28	Environmental Studies	R16HAS1102	2.40	2.22	2.39	2.28	2.26	2.28	2.30
29	Electromagnetic Theory and Transmission Lines	R16ECE1107	2.41	2.30	2.36	2.51	2.33	2.26	2.36
30	Digital Design using Verilog HDL	R16ECE1132	2.39	2.27	2.33	2.32	2.33	2.29	2.32
31	Electrical Technology Lab.	R16EEE1213	2.31	2.42	2.31	2.29	2.26	2.30	2.32
32	Electronic Circuits and Pulse Circuits Lab.	R16ECE1204	2.38	2.36	2.35	2.44	2.26	2.40	2.37
33	Control Systems Engineering	R16EEE1114	2.32	2.35	2.41	2.46	2.36	2.40	2.38
34	Computer Organization and Operating Systems	R16CSE1111	2.32	2.48	2.38	2.29	2.31	2.26	2.34
35	Antennas and Wave Propagation	R16ECE1108	2.28	2.27	2.29	2.28	2.19	2.41	2.29
36	Computer Networks	R16CSE1139	2.31	2.47	2.34	2.31	2.27	2.36	2.34

37	Analog Communications	R16ECE1110	2.33	2.33	2.38	2.32	2.37	2.30	2.34
38	Linear and Digital IC Applications	R16ECE1111	2.31	2.32	2.36	2.30	2.32	2.30	2.32
39	Analog Communications Lab.	R16ECE1205	2.26	2.37	2.33	2.40	2.33	2.46	2.36
40	IC Applications and HDL Simulation Lab	R16ECE1206	2.34	2.39	2.41	2.41	2.41	2.28	2.37
41	Managerial Economics and Financial Analysis	R16HAS1103	2.35	2.33	2.40	2.34	2.39	2.35	2.36
42	Television Engineering	R16ECE1122	2.36	2.38	2.40	2.30	2.30	2.46	2.37
43	Digital Communications	R16ECE1112	2.24	2.29	2.09	2.23	2.25	2.27	2.23
44	VLSI Design	R16ECE1115	2.39	2.34	2.43	2.37	2.41	2.17	2.35
45	Microprocessors and Microcontrollers	R16ECE1113	2.26	2.34	2.41	2.23	2.37	2.39	2.33
46	Digital Signal Processing	R16ECE1114	2.33	2.40	2.19	2.31	2.36	2.51	2.35
47	Microprocessors and Microcontrollers Lab	R16ECE1207	2.40	2.44	2.41	2.40	2.37	2.43	2.41
48	Digital Signal Processing Lab	R16ECE1208	2.48	2.47	2.52	2.45	2.39	2.43	2.46
49	Management Science	R16HAS1104	2.57	2.55	2.64	2.53	2.55	2.51	2.56
50	Microwave Engineering	R16ECE1116	2.45	2.57	2.56	2.54	2.49	2.48	2.51
51	Embedded Systems Design	R16ECE1121	2.52	2.54	2.47	2.51	2.38	2.56	2.50
52	Cellular and Mobile Communications	R16ECE1124	2.57	2.53	2.48	2.43	2.43	2.47	2.48
53	Digital Image Processing	R16ECE1119	2.43	2.57	2.51	2.54	2.68	2.58	2.55
54	Optical Communications	R16ECE1120	2.46	2.53	2.48	2.47	2.46	2.48	2.48

55	Advanced English Language Communication Skills Lab	R16HAS1202	2.55	2.49	2.59	2.49	2.38	2.40	2.48
56	Microwave Engineering and Digital Communications Lab	R16ECE1210	2.36	2.47	2.49	2.50	2.52	2.42	2.46
57	Satellite Communications	R16ECE1125	2.48	2.43	2.43	2.45	2.45	2.55	2.47
58	Radar Systems	R16ECE1128	2.48	2.43	2.43	2.45	2.43	2.45	2.45
59	Wireless Communications and Networks	R16ECE1131	2.45	2.50	2.45	2.53	2.53	2.56	2.50

2017-21 CO Overall Attainment

S.No	Course Title	Course Code	CO DIRECT ATTAINMENT	80% OF CO DIRECT ATTAINMENT	CO INDIRECT ATTAINMENT	20% OF CO INDIRECT ATTAINMENT	TOTAL=80% OF DIRECT ATTAINMENT+20% OF INDIRECT ATTAINMENT
1	English	R16HAS1101	2.79	2.23	2.27	0.45	2.75
2	Mathematics –I	R16MTH1101	1.96	1.57	2.27	0.45	1.96
3	Engineering Physics –I	R16EPH1101	2.65	2.12	2.30	0.46	2.61
4	Computer Programming	R16CSE1101	2.44	1.95	2.25	0.45	2.39
5	Engineering Drawing	R16MED1144	2.67	2.14	2.27	0.45	2.64

6	English Language & Communication Skills Lab	R16HAS120 1	2.58	2.06	2.19	0.44	2.53
7	Computer Programming Lab	R16CSE120 1	2.79	2.23	2.24	0.45	2.74
8	Workshop practice	R16MED120 1	2.23	1.78	2.24	0.45	2.18
9	Mathematics – II	R16MTH110 2	2.33	1.86	2.23	0.45	2.33
10	Numerical Methods	R16MTH110 3	2.65	2.12	2.24	0.45	2.60
11	Engineering Physics –II	R16EPH110 2	2.58	2.06	2.28	0.46	2.54
12	Data Structures Through ‘C’	R16CSE110 2	2.65	2.12	2.16	0.43	2.60
13	Engineering Chemistry	R16ECH110 1	2.51	2.01	2.24	0.45	2.46
14	Data Structures Through ‘C’ Lab	R16CSE120 2	2.86	2.29	2.25	0.45	2.82
15	Engineering Chemistry Lab	R16ECH120 1	2.51	2.01	2.21	0.44	2.74
16	Engineering Physics – II Lab	R16EPH120 1	2.30	1.84	2.23	0.45	2.25
17	Mathematics – III	R16MTH110 4	2.25	1.80	2.33	0.47	2.22
18	Probability Theory and Stochastic Processes	R16ECE110 1	2.3	1.84	2.29	0.46	2.26

19	Switching Theory and Logic Design	R16ECE1106	2.11	1.69	2.34	0.47	2.02
20	Electrical Circuits	R16EEE1101	2.39	1.91	2.29	0.46	2.36
21	Electronic Devices and Circuits	R16ECE1102	2.6	2.08	2.36	0.47	2.57
22	Signals and Systems	R16ECE1103	2.51	2.01	2.27	0.45	2.47
23	Electronic Devices and Circuits Lab.	R16ECE1201	2.58	2.06	2.31	0.46	2.54
24	Basic Simulation Lab.	R16ECE1202	2.58	2.06	2.38	0.48	2.54
25	Principles of Electrical Engineering	R16EEE1129	2.32	1.86	2.31	0.46	2.29
26	Electronic Circuit Analysis	R16ECE1104	2.3	1.84	2.28	0.46	2.61
27	Pulse and Digital Circuits	R16ECE1105	2.67	2.14	2.32	0.46	2.64
28	Environmental Studies	R16HAS1102	2.18	1.74	2.30	0.46	2.15
29	Electromagnetic Theory and Transmission Lines	R16ECE1107	2.11	1.69	2.36	0.47	2.12
30	Digital Design using Verilog HDL	R16ECE1132	2.32	1.86	2.32	0.46	2.30

31	Electrical Technology Lab.	R16EEE121 3	2.58	2.06	2.32	0.46	2.54
32	Electronic Circuits and Pulse Circuits Lab.	R16ECE120 4	2.65	2.12	2.37	0.47	2.68
33	Control Systems Engineering	R16EEE111 4	2.51	2.01	2.38	0.48	2.47
34	Computer Organization and Operating Systems	R16CSE111 1	2.44	1.95	2.34	0.47	2.40
35	Antennas and Wave Propagation	R16ECE110 8	2.02	1.62	2.29	0.46	1.98
36	Computer Networks	R16CSE113 9	2.37	1.90	2.34	0.47	2.33
37	Analog Communications	R16ECE111 0	2.51	2.01	2.34	0.47	2.47
38	Linear and Digital IC Applications	R16ECE111 1	2.3	1.84	2.32	0.46	2.26
39	Analog Communications Lab.	R16ECE120 5	2.79	2.23	2.36	0.47	2.75
40	IC Applications and HDL Simulation Lab	R16ECE120 6	2.28	1.82	2.37	0.47	2.41
41	Managerial Economics and	R16HAS110 3	2.23	1.78	2.36	0.47	2.19

	Financial Analysis						
42	Television Engineering	R16ECE112 2	2.37	1.90	2.37	0.47	2.33
43	Digital Communications	R16ECE111 2	2.51	2.01	2.23	0.45	2.46
44	VLSI Design	R16ECE111 5	2.32	1.86	2.35	0.47	2.29
45	Microprocessors and Microcontrollers	R16ECE111 3	2.72	2.18	2.33	0.47	2.68
46	Digital Signal Processing	R16ECE111 4	2.72	2.18	2.35	0.47	2.68
47	Microprocessors and Microcontrollers Lab	R16ECE120 7	1.9	1.52	2.41	0.48	1.94
48	Digital Signal Processing Lab	R16ECE120 8	2.41	1.93	2.46	0.49	2.40
49	Management Science	R16HAS110 4	1.6	1.28	2.56	0.51	1.57
50	Microwave Engineering	R16ECE111 6	2.02	1.62	2.51	0.50	1.99
51	Embedded Systems Design	R16ECE112 1	2.65	2.12	2.50	0.50	2.62
52	Cellular and Mobile Communications	R16ECE112 4	1.95	1.56	2.48	0.50	1.92

53	Digital Image Processing	R16ECE1119	2.79	2.23	2.55	0.51	2.76
54	Optical Communications	R16ECE1120	1.9	1.52	2.48	0.50	1.88
55	Advanced English Language Communication Skills Lab	R16HAS1202	2.16	1.73	2.48	0.50	2.13
56	Microwave Engineering and Digital Communications Lab	R16ECE1210	2.44	1.95	2.46	0.49	2.41
57	Satellite Communications	R16ECE1125	2.6	2.08	2.47	0.49	2.55
58	Radar Systems	R16ECE1128	2.86	2.29	2.45	0.49	2.83
59	Wireless Communications and Networks	R16ECE1131	2.23	1.78	2.50	0.50	2.20

2017-21 PO/PSO Direct Attainment																	
S.No	Course Title	Course Code	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
1	English	R16HAS1101	-	-	2.29	1.37	1.37	2.29	1.37	1.37	1.37	2.29	-	2.29	-	-	-
2	Mathematics – I	R16MTH1101	1.96	2	2.02	1.83	0.94	0.98	-	-	-	-	-	0.65	1.96	0.65	1.96
3	Engineering Physics –I	R16EPH1101	1.3	2.61	1.3	2.61	2.61	-	-	-	-	-	-	1.74	-	2.61	0.87
4	Computer Programming	R16CSE1101	1.99	1.99	1.99	1.19	1.19	-	-	-	0.39	0.79	-	0.39	0.39	1.19	0.39
5	Engineering Drawing	R16MED1144	2.56	0.44	0.44	0.44	0.44	0.44	-	1.32	0.44	0.44	-	-	0.44	-	-
6	English Language & Communication Skills Lab	R16HAS1201	0.84	0.84	0.84	0.84	-	0.84	0.84	0.84	2.11	2.11	0.84	2.11	0.84	2.11	0.84
7	Computer Programming Lab	R16CSE1201	1.37	0.91	0.91	0.46	1.37	-	-	-	0.46	-	-	-	0.46	1.37	-
8	Workshop practice	R16MED1201	1.09	-	0.36	-	-	0.73	0.73	1.09	1.09	-	-	-	0.73	1.82	1.09
9	Mathematics – II	R16MTH1102	2.33	2.33	2.33	2.42	1.18	1.19	-	-	-	-	-	0.78	2.33	0.78	2.33
10	Numerical Methods	R16MTH1103	2.17	2.17	2.61	2.6	1.3	0.43	-	-	-	-	0.43	1.3	2.6	2.6	2.61
11	Engineering Physics –II	R16EPH1102	1.27	2.11	2.54	2.54	2.11	-	1.27	-	-	-	-	2.54	-	2.54	2.11
12	Data Structures Through ‘C’	R16CSE1102	1.3	1.3	1.3	1.3	1.3	-	-	-	0.43	-	0.43	-	1.3	1.3	0.43
13	Engineering Chemistry	R16ECH1101	2.47	2.46	2.05	-	-	-	1.23	-	-	-	-	-	1.23	1.23	-

14	Data Structures Through 'C' Lab	R16CSE1202	2.35	2.35	1.41	-	2.35	-	0.94	-	0.94	-	-	-	1.41	-	2.35
15	Engineering Chemistry Lab	R16ECH1201	2.74	2.74		-	-	1.37	1.37	-	1.37	-	-	1.37	1.37	1.37	-
16	Engineering Physics – II Lab	R16EPH1201	1.13	1.88	2.25	0.75	2.26	-	1.13	-	-	-	-	0.75	1.88	2.25	-
17	Mathematics – III	R16MTH1104	2.26	2.26	1.05	2.14	2.2	0.37	0.37	0.37	0.37	0.37	-	-	1.11	1.76	1.88
18	Probability Theory and Stochastic Processes	R16ECE1101	2.26	2.26	0.38	0.38	2.26	0.38	0.38	0.38	0.38	0.38	-	-	1.5	1.13	1.13
19	Switching Theory and Logic Design	R16ECE1106	2.12	2.12	1.65	0.63	2.11	0.35	0.35	0.31	0.35	0.35	-	-	2.12	1.37	1.04
20	Electrical Circuits	R16EEE1101	2.34	2.36	0.4	0.4	2.38	-	0.4	0.4	0.4	0.4	-	-	2.4	1.54	1.18
21	Electronic Devices and Circuits	R16ECE1102	2.61	1.73	1.31	1.62	2.58	-	0.43	0.44	0.44	0.44	-	-	2.61	1.62	2.53
22	Signals and Systems	R16ECE1103	2.06	2.47	1.23	1.23	2.47	-	0.41	0.41	0.41	-	0.41	-	2.47	1.64	1.23
23	Electronic Devices and Circuits Lab.	R16ECE1201	2.54	2.54	0.42	1.27	2.54	0.42	0.42	0.42	0.42	0.42	-	-	1.69	0.42	2.12
24	Basic Simulation Lab.	R16ECE1202	2.54	2.54	2.12	1.27	2.54	0.42	0.42	0.42	0.42	0.42	-	-	2.54	1.69	1.7
25	Principles of Electrical Engineering	R16EEE1129	2.25	2.27	1.55	1.16	2.32	-	0.37	-	0.37	0.39	-	0.39	0.37	2.33	0.39
26	Electronic Circuit Analysis	R16ECE1104	1.51	2.26	2.26	2.26	1.13	-	-	0.38	0.38	0.38	0.38	0.38	1.51	0.75	1.13

27	Pulse and Digital Circuits	R16ECE1105	2.64	1.67	1.34	0.89	2.68	0.45	0.89	0.45	0.45	0.45	0.43	0.45	2.68	1.79	1.78
28	Environmental Studies	R16HAS1102	-	-	1.07	0.36	0.36	-	1.07	0.72	-	0.36	-	-	-	0.36	0.36
29	Electromagnetic Theory and Transmission Lines	R16ECE1107	2.12	2.12	1.06	0.35	2.12	0.35	0.35	0.35	0.35	0.35	-	-	2.13	1.06	2.12
30	Digital Design using Verilog HDL	R16ECE1132	2.21	2.29	1.16	1.55	2.25	-	0.39	0.39	0.39	0.39	-	-	1.82	0.39	2.3
31	Electrical Technology Lab.	R16EEE1213	2.54	2.54	1.27	2.54	2.54	0.42	0.42	0.42	0.42	0.42	-	-	1.27	2.12	2.12
32	Electronic Circuits and Pulse Circuits Lab.	R16ECE1204	2.61	2.18	2.61	2.61	1.74	0.44	0.44	0.44	0.44	0.44	-	-	2.61	1.74	2.61
33	Control Systems Engineering	R16EEE1114	2.47	2.47	0.41	0.41	2.47	0.41	-	0.41	0.41	0.41	-	-	1.65	0.41	2.47
34	Computer Organization and Operating Systems	R16CSE1111	1.60	1.20	2.00	2.00	2.40	-	0.40	0.40	0.40	-	0.40	-	0.80	1.20	1.20
35	Antennas and Wave Propagation	R16ECE1108	1.32	0.99	0.99	1.65	1.65	-	-	0.33	0.33	0.33	-	0.33	0.99	0.33	0.99
36	Computer Networks	R16CSE1139	1.16	1.94	2.33	1.94	2.33	-	-	0.39	0.39	0.39	0.39	0.39	0.39	1.16	0.78
37	Analog Communications	R16ECE1110	2.5	2.06	1.65	0.41	2.47	0.41	-	0.41	0.41	0.41	0.41	0.41	1.24	0.82	1.23
38	Linear and Digital IC Applications	R16ECE1111	1.51	1.13	1.51	0.75	2.26	-	-	0.38	0.38	0.38	0.38	0.38	0.75	1.13	1.13

39	Analog Communicatio ns Lab.	R16ECE120 5	1.3 8	0.9 2	1.3 8	1.3 8	2.7 5	0.4 6	-	0.4 6	0.4 6	0.46	-	0.46	0.46	1.37	1.38
40	IC Applications and HDL Simulation Lab	R16ECE120 6	1.1 5	1.9 2	0.7 7	1.9 2	2.3	0.3 8	-	0.3 8	0.3 8	0.38	-	0.38	1.15	0.38	0.38
41	Managerial Economics and Financial Analysis	R16HAS110 3	-	0.3 7	0.3 7	-	1.1	-	0.3 7	0.3 7	0.3 7	0.37	0.73	0.37	0.37	0.37	0.37
42	Television Engineering	R16ECE112 2	1.1 7	1.9 4	1.5 6	1.9 4	1.1 7	0.3 9	-	0.3 9	0.3 9	0.39	0.39	0.39	0.78	0.39	1.55
43	Digital Communicatio ns	R16ECE111 2	1.6 4	2.4 7	0.8 2	0.8 2	2.0 5	-	-	0.4 1	0.4 1	0.41	0.41	0.41	1.64	1.23	1.64
44	VLSI Design	R16ECE111 5	1.5 6	1.5 5	2.2 1	2.2 9	1.1 7	0.3 9	0.3 9	0.3 9	0.3 9	-	0.39	0.39	1.56	0.74	1.17
45	Microprocesso rs and Microcontrolle rs	R16ECE111 3	1.7 9	2.6 8	1.7 8	1.3 4	1.3 4	0.4 5	-	0.4 5	0.4 5	0.45	0.45	0.45	1.79	0.45	2.68
46	Digital Signal Processing	R16ECE111 4	1.7 9	2.6 8	1.7 9	2.2 4	2.6 8	0.4 5	-	0.4 5	0.4 5	0.45	0.45	0.45	2.23	1.34	1.34
47	Microprocesso rs and Microcontrolle rs Lab	R16ECE120 7	1.6 5	0.9 7	1.9	1.9 6	0.9 7	0.3 3	-	0.3 1	0.3 1	0.33	0.33	0.33	1.98	1.32	0.95
48	Digital Signal Processing Lab	R16ECE120 8	2.4 4	1.6 3	2.3 6	0.3 9	2.4	0.3 9	-	0.3 9	0.3 9	0.39	0.41	0.41	1.99	1.65	1.2
49	Management Science	R16HAS110 4	-	-	1.5 7	-	-	-	0.7 8	0.2 6	0.5 2	0.79	1.57	0.26	0.26		1.57
50	Microwave Engineering	R16ECE111 6	1.9 9	1.9 9	0.6 6	0.3 3	1.9 9	-	1	0.3 3	0.1 6	0.33	0.66	-	0.33	0.66	1.66
51	Embedded Systems	R16ECE112 1	2.1 8	2.6 2	0.4 4	2.6 2	2.6 2	-	0.4 4	0.4 4	0.4 4	1.31	1.31	-	2.62	1.31	2.62

[illegible]

2017-21 Summary of PO/PSO Attainment based on Indirect method

ACADEMIC YEAR 2021-2022

ALUMNI FEEDBACK :: TOTAL -100

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3
1	28	22	19	29	39	51	26	18	23	35	23	47	32	12	24
2	32	30	57	33	43	29	22	44	48	24	45	24	17	23	18
3	40	48	24	38	18	20	52	38	29	41	32	29	51	65	58
Total Score	212	226	205	209	179	169	226	220	206	206	209	182	219	253	234
Weighted Average	2.1 2	2.2 6	2.0 5	2.0 9	1.7 9	1.6 9	2.2 6	2.2 6	2.0 6	2.06	2.09	1.82	2.19	2.53	2.34

EXIT SURVEY :: TOTAL NO.OF STUDENTS-180

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3
1	53	38	49	67	39	48	89	52	43	32	44	93	55	20	28
2	48	82	51	60	51	86	49	72	50	93	64	45	68	82	90
3	79	60	80	53	90	46	42	56	87	55	72	42	57	78	62
Total Score	386	382	391	346	411	358	313	364	404	383	388	309	362	418	394
Weighted Average	2.1 4	2.1 2	2.1 7	1.9 2	2.2 8	1.9 9	1.7 4	2.0 2	2.2 4	2.13	2.16	1.72	2.01	2.32	2.19

EMPLOYER FEEDBACK :: TOTAL -30

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3
1	19	10	14	9	13	8	11	10	5	8	14	3	12	4	7

2	7	15	3	11	10	7	13	8	9	13	2	10	8	12	9
3	4	5	13	10	7	15	6	12	16	9	14	17	10	14	14
Total Score	45	55	59	61	54	67	55	62	71	61	60	74	58	70	67
Weighted Average	1.50	1.83	1.97	2.03	1.80	2.23	1.83	2.07	2.37	2.03	2.00	2.47	1.93	2.33	2.23
PARENTS FEEDBACK :: TOTAL -20															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	11	1	9	6	3	9	15	10	11	7	3	6	9	7	6
2	5	12	5	3	9	6	3	2	4	11	4	5	5	7	2
3	4	7	6	11	8	5	2	8	5	2	13	9	6	6	12
Total Score	33	46	37	45	45	36	27	38	34	35	50	43	37	39	46
Weighted Average	1.65	2.30	1.85	2.25	2.25	1.80	1.35	1.90	1.70	1.75	2.50	2.15	1.85	1.95	2.30
PROFESSIONAL SOCIETY MEMBERS FEEDBACK :: TOTAL -12															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	7	2	5	6	4	8	5	1	2	5	3	6	2	5	7
2	3	4	3	2	7	1	2	7	6	4	4	3	3	4	1
3	2	6	4	4	1	3	5	4	4	3	5	3	7	3	4
Total Score	19	28	23	22	21	19	24	27	26	22	26	21	29	22	21
Weighted Average	1.58	2.33	1.92	1.83	1.75	1.58	2.00	2.25	2.17	1.83	2.17	1.75	2.42	1.83	1.75
Summary of attainment based on indirect method															

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ASSESSMENT MODES	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
ALUMNI FEEDBACK	2.12	2.26	2.05	2.09	1.79	1.69	2.26	2.2	2.06	2.06	2.09	1.82	2.19	2.53	2.34
EXIT SURVEY	2.14	2.12	2.17	1.92	2.28	1.99	1.74	2.02	2.24	2.13	2.16	1.72	2.01	2.32	2.19
EMPLOYER FEEDBACK	1.5	1.83	1.97	2.03	1.80	2.23	1.83	2.07	2.37	2.03	2.00	2.47	1.93	2.33	2.33
PARENTS FEEDBACK	1.65	2.3	1.85	2.25	2.25	1.8	1.35	1.9	1.7	1.75	2.50	2.15	1.85	1.95	2.3
PROFESSIONAL SOCIETY MEMBER FEEDBACK	1.58	2.33	1.92	1.83	1.75	1.58	2.00	2.25	2.17	1.83	2.17	1.75	2.42	1.83	1.75
AVERAGE	1.80	2.17	1.99	2.02	1.97	1.86	1.84	2.09	2.11	1.96	2.18	1.98	2.08	2.19	2.18

2017-21 PO/PSO Overall Attainment															
PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
2017-21 PO/PSO Direct Attainment	1.95	1.91	1.41	1.45	1.94	0.58	0.63	0.46	0.49	0.57	0.58	0.73	1.49	1.27	1.51
80% of Direct Attainment	1.56	1.53	1.13	1.16	1.55	0.46	0.51	0.37	0.39	0.46	0.46	0.58	1.19	1.02	1.21
2017-21 PO/PSO Indirect Attainment	1.8	2.17	1.99	2.02	1.97	1.86	1.84	2.09	2.11	1.96	2.18	1.98	2.08	2.19	2.18
20% of Indirect Attainment	0.36	0.43	0.4	0.4	0.39	0.37	0.37	0.42	0.42	0.39	0.44	0.4	0.42	0.44	0.44

Overall PO/PSO Attainment= 80% of Direct Attainment+ 20% of Indirect Attainment	1.9 2	1.9 6	1.5 2	1.5 6	1.9 4	0.8 4	0.8 7	0.7 9	0.8 1	0.85	0.9	0.98	1.61	1.45	1.65
--	----------	----------	----------	----------	----------	----------	----------	----------	----------	------	-----	------	------	------	------

2017-21 PO/PSO Target Attainment

PO/PSO	P O1	P O2	P O3	P O4	P O5	P O6	P O7	P O8	P O9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3
2017-2021 PO/PSO Attainment	1.9 2	1.9 6	1.5 2	1.5 6	1.9 4	0.8 4	0.8 7	0.7 9	0.8 1	0.8 5	0.9	0.9 8	1.6 1	1.4 5	1.6 5
2014-2018 PO/PSO Attainment	2.6 5	2.1 9	2.2	2.2	2.7	2.7 1	2.6 9	2.7 3	2.7	2.6 3	2.6 6	2.6 9	2.6 4	2.1 8	2.6 5
2015-2019 PO/PSO Attainment	1.9	1.8 1	1.4 3	1.3 5	1.8 5	0.5 3	0.6 1	0.4 7	0.4 5	0.5 3	0.5 8	0.6 7	1.5 4	1.2 2	1.4 7
2016-2020 PO/PSO Attainment	1.9 2	1.7 9	1.4 4	1.3 8	1.9 4	0.4 6	0.6 5	0.4 3	0.4 3	0.5 1	0.5 8	0.5 8	1.5 6	1.2 1	1.6
Target Level (Average PO/PSO attainment of the previous three batches)	2.1 6	1.9 3	1.6 9	1.6 4	2.1 6	1.2 3	1.3 2	1.2 1	1.1 9	1.2 2	1.2 7	1.3 1	1.9 1	1.5 4	1.9 1
Target attainment Status	N A	A	N A	N A	N A	N A	N A	N A	N A	NA	NA	NA	NA	NA	NA