ATTAINMENT OF COURSE OUTCOME AND

PROGRAMME SPECIFIC OUTCOME

COURSE OUTCOME AND PROGRAMME OUTCOME

St. Xavier's College adopts Benjamin Bloom's Taxonomy in bringing desired course outcome at the end of each course being offered to students of various disciplines. Bloom's Taxonomy is a classification of the different objectives and skills that educators set for their students (learning objectives). The taxonomy was proposed in 1956 by Benjamin Bloom, an educational psychologist at the University of Chicago. The terminology has been recently updated to include six levels of learning. The following 6 levels proposed by Bloom are being used to structure the learning objectives, lessons, and assessments of each course:

1. **Remembering:** Retrieving, recognizing, and recalling relevant knowledge from long-term memory.
2. **Understanding:** Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.
3. **Applying:** Carrying out or using a procedure for executing, or implementing.
4. **Analyzing:** Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.
5. **Evaluating:** Making judgments based on criteria and standards through checking and critiquing.
6. **Creating:** Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.

To complement this, the College follows the Outcome-Based Education. Each department in the college focuses on the result-based learning process. Every teacher tries her/his best and ensures the course she or he teaches brings desired outcome and eventually the students are able to remember, understand, apply, analyze and evaluate what they learned and eventually creates something worth out of the learning. These course outcomes are drawn based on the Program Outcomes. A multipronged teaching methodology is being put in place to offer a course which involves conventional lectures, workshops, seminars and conferences using ICT enabled tools and techniques. In order to achieve the course outcomes, the following methods are used in line with the learning objectives proposed by Bloom. The method, which corresponds to the course outcomes followed by the college, is as follows.

Table 2.6.1: Measurement of Course Outcome

Bloom's proposed Learning Objective		Application of Learning Objectives at St.Xavier's	
Bloom's Level	**Key Verbs (keywords)**	**Students' Learning Outcomes**	**Methods used to measure the Learning Outcomes**
Remember	list, recite, outline, define, name, match, quote, recall, identify, label, recognize.	By the end of each lesson, the student will be able to recite concepts/theories/Quotes/ formulae/literary pieces being taught	Students are being assessed the level of her / his remembrance over what has been dealt during the class. Students are randomly selected and are asked to recall the taught matter at the end of the each class and at the beginning of next class
Understand	describe, explain, paraphrase, restate, give original examples of, summarize, contrast, interpret, discuss.	By the end of each lesson, the students will be able to describe what is being taught in her/his own words.	A platform is provided for every student to undergo Continuous Internal Assessment Tests and Semester Exams to reproduce in her/his own words what she or he has understood about the lessons taught in every course
Apply	calculate, predict, apply, solve, illustrate, use, demonstrate, determine, model, perform, present.	By the end of each lesson, the student will be able to apply what she/he has conceived.	Science labs, Computer labs, Field exposures are offered to students to make an application of their learning
Analyze	classify, break down, categorize, analyze, diagram, illustrate, criticize, simplify,	By the end of this lesson, the student will be able to differentiate between concepts, items, and	Quiz programmes and Assignments are used as methods to check whether they are able to

	associate.	components of matters being taught under each lesson. And they will be accordingly analyze, make association and create appropriate criticisms	analyze. By performing such tasks the students are able to make an analysis of what they have learned
Evaluate	choose, support, relate, determine, defend, judge, grade, compare, contrast, argue, justify, support, convince, select, evaluate.	By the end of each lesson, the student will be able to determine whether using a particular method would be more appropriate for solving a problem	Lab and field facilities are offered to evaluate and check their learning besides CIA Tests and Semester Examinations
Create	design, formulate, build, invent, create, compose, generate, derive, modify, develop.	By the end of this lesson, the students will be able to design an original homework or product of their own dealing with a particular issue or task or program	Students come out with projects, assignments and seminars which they have created on the lessons they learned

Criteria for Assessment of Course Outcome

The performance of the students is further assessed based on certain criteria. They are as follows:

Table 2.6.2: Assessment for PG: Method 1

Component	Maximum Marks		Maximum Weightage in %
	Assessed	Awarded	
CIA Test 1	70	35	15
CIA Test 2	70	35	15
Mode 1	15	15	12
Mode 2	15	15	12
Semester	100	100	40
Attendance			6
Total			**100**

Table 2.6.3: Assessment Method for PG: Method 2

Component	Maximum Marks		Maximum Weightage in %
	Assessed	Awarded	
CIA Test 1	70	35	15
CIA Test 2	70	35	15
Mode 1	10	10	8
Mode 2	10	10	8
Mode 3	10	10	8
Semester	100	100	40
Attendance			6
Total			**100**

Table 2.6.4: Assessment for UG: Method 1

Component	Maximum Marks		Maximum Weightage in %
	Assessed	Awarded	
CIA Test 1	50	35	15
CIA Test 2	50	35	15
Mode 1	15	15	12
Mode 2	15	15	12
Semester	100	100	40
Attendance			6
Total			**100**

Table 2.6.5: Assessment Method for UG: Method 2

Component	Maximum Marks		Maximum Weightage in %
	Assessed	Awarded	
CIA Test 1	50	35	15
CIA Test 2	50	35	15
Mode 1	10	10	8
Mode 2	10	10	8
Mode 3	10	10	8
Semester	100	100	40
Attendance		100%	6
Total			**100**

Each department has the freedom to use any one of the two methods stated above. Using such a method, weightage is given in accordance to the significance of each component that could assess the learning outcome. The data used for evaluating Course Outcome is attained from the students' marks and attendance obtained through the assessment process. Below example has the calculation made for granting weightage considering the UG Method 2.

Table 2.6.6: Weightage allotted components of learning outcome

Component	Modal Marks Obtained	Parameter	Weightage
CIA Test 1	30	30/35*15	12.86
CIA Test 2	25	25/35*15	10.71
Mode 1	7	7/10*8	5.60
Mode 2	8	8/10*8	6.40
Mode 3	7	7/10*8	5.60
Semester	77	77/100*40	30.80
Attendance	85%	85/100*6	5.10
Total			77.07

Assessment of Outcomes

The above stated application of course outcomes obtained by the students of St. Xavier's are assessed through different evaluative methods. Performances of the students are assessed through two Continuous Internal Assessment (CIA) Tests are equally phased out with 40 working days before the commencement of each test. During these 80 working days, the students undergo any two or three of the below listed modes of internal assessment.

1. Quiz (announced / unannounced)
2. Individual viva or group viva
3. Short duration objective type tests / snap tests
4. Short answer / problem solving tests (15 minutes to 30 minutes for periodical assessment of cognitive abilities)
5. Long answer tests / essay writing (30 minutes to 60 minutes for periodical assessment of higher order cognitive abilities)
6. Guided individual / group projects (only for a few talented students)
7. Lab / Field / Practical work / Case study (to assess practical skills in handling instruments, experimenting, reporting, etc.)
8. Group discussion (once a month to assess originality, creativity, initiative, communication skills, etc.)
9. Seminar (at least once in a semester to assess creativity, innovative and communicative ability, etc.)
10. Assignment (to assess the conceptual clarity)

By application of these assessments, each student is evaluated as how far she or he remembers, understands, applies, analyzes, evaluates and creates based on the learning. Accordingly weightage for the learning outcomes are given as per the above table 2.6.6, a 5 point itemised scale is used to find out the attainment of course outcome and eventually the programme specific outcome. Below is the itemised 5-point scale used for UG Programmes.

Table: 2.6.7: Weightage by students and Scale used to assess the attainment

Weightage obtained	Scale used	Level of attainment of Outcome
0 to 39	1	Lower
40 to 49	2	Low
50 to 59	3	Moderate
60 to 74	4	High
75 to 100	5	Higher

2.6.2. Attainment of Course Outcome across Under Graduate Programmes offered at St. Xavier's College – Department wise: Nov 2018

S. NO.	Department	Year	Course	Mean
1	BBA	III	Business Ethics	3.30
2	BBA	III	Financial Management	2.26
3	BBA	III	Business Legislations	2.66
4	BBA	III	Organisational Behaviour	2.72
5	BBA	III	Logistics Management	2.64
6	BBA	III	Elective Case Analysis	3.18
7	BBA	III	Internship Training	3.66
8	BBA	II	Banking and Insurance	2.72
9	BBA	II	Managerial Economics	3.51
10	BBA	II	Marketing Management	3.03
11	BBA	II	Allied - Computer Application	3.59
12	BBA	II	Practical - Computer App	4.77
13	BBA	II	SBE 5: Steping into a Business	3.02
14	BBA	I	Part I - Tamil	2.48
15	BBA	I	Part II - English	3.00
16	BBA	I	Principles of Management	2.75
17	BBA	I	Financial Accounting	3.31
18	BOT	III	Biochemistry & Biophysics	2.74
19	BOT	III	Cell Biology	3.21
20	BOT	III	Ecology	2.38
21	BOT	III	Microbiology & Plant Biology	2.53
22	BOT	III	Practical - Biochemistry	3.65
23	BOT	III	Practical - Cellbiology	2.59
24	BOT	III	Practical - Ecology	3.85
25	BOT	III	Elective - Biological Techniques	2.88
26	BOT	II	Anotomy & Embryology	3.12
27	BOT	II	Animal Structure and Function	3.00
28	BOT	II	Prac. Anotomy & Embryology	3.73
29	BOT	II	Prac.Animal Structure & Function	3.12
30	BOT	II	SBE 5: Herbal Botany	2.88

31	BOT	II	Part I - Tamil	3.21
32	BOT	II	Part II - English	2.91
33	BOT	I	Part I - Tamil	3.18
34	BOT	I	Part II - English	3.44
35	BOT	I	Plant Diversity	2.90
36	BOT	I	Allied - Chemistry1	2.74
37	BOT	I	Prac. Plant Diversity	2.51
38	BOT	I	Prac. Chemistry1	3.59
39	CAS	II	Accounting Packages	3.69
40	CAS	II	Business Accounting	3.15
41	CAS	II	C Programming	3.65
42	CAS	II	Allied-Business Mathematics	3.89
43	CAS	II	Practical - Accounting Packages	3.79
44	CAS	II	Practical - C Programming	4.52
45	CAS	II	On the Job Training	3.23
46	CAS	II	SBE 5: Online Trading & Demat Operations	2.63
47	CAS	I	Financial Accounting	3.33
48	CAS	I	Allied - Computer Fundamentals	3.86
49	CAS	I	Practical - Computer Fundamentals	4.17
50	CAS	I	Part I - Tamil	2.87
51	CAS	I	Part II - English	3.37
52	CCS	III	Auditing	3.96
53	CCS	III	Corporate Secretarial	3.75
54	CCS	III	Cost Accounting	4.02
55	CCS	III	Income Tax	3.42
56	CCS	III	Summer Internship	3.92
57	CCS	III	Elective-Marketing Mangement	3.91
58	CCS	II	Business Organisation & Mgt.	2.94
59	CCS	II	Company Law	3.34
60	CCS	II	Corporate Accounting	2.29
61	CCS	II	Business Statistics	2.90
62	CCS	II	SBE5: Stakeholders & Governance	3.29
63	CCS	I	Fundamentals of Accounting	3.77
64	CCS	I	Allied-Business Org. & Mgt.	3.25
65	CCS	I	Part I - Tamil	2.65
66	CCS	I	Part II - English	3.31
67	CHE	III	Inorganic Chemistry III	3.85
68	CHE	III	Organic Chemistry III	2.70
69	CHE	III	Physical Chemistry I	3.23
70	CHE	III	Physical Chemistry II	3.26
71	CHE	III	Prac. Estimation of Organic Compounds	4.72
72	CHE	III	Prac. Inorganic Gravimetric Estimation	4.91
73	CHE	III	Pr. Preparation of Coordination Compounds	4.94
74	CHE	III	Pr. Preparation of Organic Comp.	4.96
75	CHE	III	Elective - Biomolecules	3.30

76	CHE	II	Inorganic Chemistry II	3.21
77	CHE	II	Allied - Physics I	3.53
78	CHE	II	Pr. Organic Qualitative Analysis I	4.96
79	CHE	II	Allied - Practical - Physics I	4.77
80	CHE	II	SBE5: Material Science	3.15
81	CHE	II	Part I - Tamil	3.53
82	CHE	II	Part II - English	3.45
83	CHE	I	Inorganic Chemistry I	2.91
84	CHE	I	Allied-Mathematics I	2.84
85	CHE	I	Prac. Inorganic Volumetric Est I	4.70
86	CHE	I	Part I - Tamil	3.58
87	CHE	I	Part II - English	3.74
88	COE	III	Contemporary Banking	3.93
89	COE	III	Cost Accounting	3.67
90	COE	III	Customer Relationship	3.19
91	COE	III	Human Resource Mangement	3.63
92	COE	III	Income Tax Law & Practices	3.52
93	COE	III	Internet & Web Design	3.85
94	COE	III	Oracle	4.00
95	COE	III	Prac. Internet & Web Design	4.19
96	COE	III	Practical - Oracle	4.52
97	COE	III	Elective - Logistics Mgt.	3.19
98	COE	III	Elective - VB.NET	3.52
99	COE	III	Elective - Prac. - VB.NET	3.89
100	COE	II	Accounting Packages	3.85
101	COE	II	Business Accounting	3.56
102	COE	II	Commercial Law	3.24
103	COE	II	Allied - Business Mathematics	3.96
104	COE	II	Practical - Accounting Packages	4.27
105	COE	II	SBE5: Online Trading & Demat Operations	3.58
106	COE	I	Financial Accounting	3.22
107	COE	I	Allied-Business Economics	3.23
108	COE	I	Part I - Tamil	2.63
109	COE	I	Part II - English	3.11
110	COM	III	Contemporary Banking	3.71
111	COM	III	Cost Accounting	3.28
112	COM	III	Customer Relationship	3.40
113	COM	III	Human Resource Mangement	3.73
114	COM	III	Income Tax Law & Practices	4.19
115	COM	III	Internet & Web Design	3.40
116	COM	III	Oracle	3.90
117	COM	III	Prac. Internet & Web Design	3.80
118	COM	III	Practical - Oracle	4.55
119	COM	III	Elective - Logistics Mgt.	3.73
120	COM	III	Elective - VB.NET	3.35

121	COM	III	Elective - Prac. - VB.NET	3.80
122	COM	II	Accounting Packages	3.89
123	COM	II	Business Accounting	3.44
124	COM	II	Commercial Law	2.84
125	COM	II	Allied - Business Mathematics	3.89
126	COM	II	Practical - Accounting Packages	4.12
127	COM	II	SBE5: Online Trading & Demat Operations	2.96
128	COM	I	Financial Accounting	3.89
129	COM	I	Allied-Business Economics	3.42
130	COM	I	Part I - Tamil	3.41
131	COM	I	Part II - English	3.80
132	CSC	III	Operating System	2.79
133	CSC	III	PHP and MySQL	2.96
134	CSC	III	Programming in ASP Dot Net	2.77
135	CSC	III	Web Designing	3.26
136	CSC	III	Practical - HTML and XML	4.19
137	CSC	III	Prac. Operating System Routines	3.98
138	CSC	III	Practical - PHP and MySQL	3.47
139	CSC	III	Prac. Programming in ASP Dot Net	3.32
140	CSC	III	Elective - Software Engineering	2.45
141	CSC	II	Data Structures & Algorithm	2.84
142	CSC	II	Programming in JAVA	3.06
143	CSC	II	Prac. Data Structures & Algorithm	3.84
144	CSC	II	Practical - Programming in JAVA	3.10
145	CSC	II	Allied-Numerical Methods with Algorithm	2.80
146	CSC	II	Prac. Numerical Methods	4.39
147	CSC	II	SBE5: Practical Visual Basic	2.94
148	CSC	I	Programming in C	2.67
149	CSC	I	Practical - Programming in C	4.65
150	CSC	I	Allied Digital Principles & Computer Architecture	2.31
151	CSC	I	Part I - Tamil	2.96
152	CSC	I	Part II - English	3.60
153	CSE	III	Operating System	3.09
154	CSE	III	PHP and MySQL	3.43
155	CSE	III	Programming in ASP Dot Net	3.14
156	CSE	III	Web Designing	3.11
157	CSE	III	Practical - HTML and XML	4.59
158	CSE	III	Prac. Operating System Routines	4.07
159	CSE	III	Practical - PHP and MySQL	3.64
160	CSE	III	Prac. Programming in ASP Dot Net	4.05
161	CSE	III	Elective - Software Engineering	2.30
162	CSE	II	Data Structures & Algorithm	2.68
163	CSE	II	Programming in JAVA	3.14
164	CSE	II	Prac. Data Structures & Algorithm	3.86
165	CSE	II	Practical - Programming in JAVA	3.66

166	CSE	II	Allied-Numerical Methods with Algorithm	3.66
167	CSE	II	Prac. Numerical Methods	4.45
168	CSE	II	SBE5: Practical - Visual Basic	2.89
169	CSE	I	Programming in C	3.08
170	CSE	I	Practical - Programming in C	3.55
171	CSE	I	Allied Digital Principles & Computer Architecture	2.92
172	CSE	I	Part I - Tamil	2.20
173	CSE	I	Part II - English	3.59
174	ECO	III	Fiscal Economics	2.13
175	ECO	III	History of Economic Thought	2.15
176	ECO	III	Indian Economic Development	2.10
177	ECO	III	Macro Economics	2.13
178	ECO	III	Money and Banking	2.02
179	ECO	III	Elective - Statistics II	2.58
180	ECO	II	International Economics	1.91
181	ECO	II	History of Indian Freedom Movement	2.13
182	ECO	II	SBE5: Data Collection & Presentation	3.41
183	ECO	II	Part I - Tamil	2.59
184	ECO	II	Part II - English	1.89
185	ECO	I	Micro Economics I	2.16
186	ECO	I	Allied - Mathematics I	2.70
187	ECO	I	Part I - Tamil	2.06
188	ECO	I	Part II - English	3.17
189	ENE	III	American Literature	3.61
190	ENE	III	British Literature III	3.35
191	ENE	III	British Literature IV	3.22
192	ENE	III	Diaspora Literature	3.37
193	ENE	III	Literary Theory and Criticism	3.02
194	ENE	III	Elective - English for Career	2.93
195	ENE	II	British Literature I	2.21
196	ENE	II	Allied - Spoken English	3.12
197	ENE	II	SBE5: Skill of Interpretation of Poetry	2.42
198	ENE	II	Part I - Tamil	3.04
199	ENE	II	Part II - English	2.86
200	ENE	I	Indian Writing in English	2.49
201	ENE	I	Literary Forms and Terms	2.09
202	ENE	I	Part I - Tamil	3.04
203	ENE	I	Part II - English	3.39
204	ENG	III	American Literature	3.47
205	ENG	III	British Literature III	3.52
206	ENG	III	British Literature IV	3.56
207	ENG	III	Diaspora Literature	3.47
208	ENG	III	Literary Theory and Criticism	3.09
209	ENG	III	Elective - English for Career	3.86
210	ENG	II	British Literature I	3.10

211	ENG	II	Allied - Spoken English	3.57
212	ENG	II	SBE5: Skills of Interpretation of Poetry	2.97
213	ENG	II	Part I - Tamil	2.99
214	ENG	II	Part II - English	3.56
215	ENG	I	Indian Writing in English	3.24
216	ENG	I	Literary Forms and Terms	2.92
217	ENG	I	Part I - Tamil	3.39
218	ENG	I	Part II - English	3.94
219	MAE	III	Abstract Algebra	4.80
220	MAE	III	C++	4.56
221	MAE	III	Differential Equation & Fourier Series	4.34
222	MAE	III	Modern Analysis	3.10
223	MAE	III	Practical C++	5.00
224	MAE	III	Elective - Linear Programming & Game Theory	4.37
225	MAE	II	Sequences and Series	4.00
226	MAE	II	Statistics I	4.23
227	MAE	II	SBE5: Techniques of Reasoning	4.25
228	MAE	II	Part I - Tamil	3.48
229	MAE	II	Part II - English	3.39
230	MAE	I	Differential & Integral Calculus	3.75
231	MAE	I	Allied - Physics I	3.73
232	MAE	I	Allied - Practical - Physics I	5.00
233	MAE	I	Part I - Tamil	3.56
234	MAE	I	Part II - English	3.71
235	MAT	III	Abstract Algebra	4.37
236	MAT	III	Differential Equation & Fourier Series	3.78
237	MAT	III	Modern Analysis	3.78
238	MAT	III	Python	4.25
239	MAT	III	Practical - Python	4.90
240	MAT	III	Elective - Linear Programming & Game Theory	4.43
241	MAT	II	Sequences and Series	4.12
242	MAT	II	Statistics I	4.31
243	MAT	II	SBE5: Bio-Informatics	3.67
244	MAT	II	Part I - Tamil	3.73
245	MAT	II	Part II - English	3.67
246	MAT	I	Differential & Integral Calculus	3.83
247	MAT	I	Allied - Physics I	3.98
248	MAT	I	Allied - Practical - Physics I	4.98
249	MAT	I	Part I - Tamil	4.23
250	MAT	I	Part II - English	4.17
251	PHY	III	Digital Principles	3.96
252	PHY	III	Electronics I	3.74
253	PHY	III	Fiber Optics	3.04
254	PHY	III	Nuclear Physics	3.53
255	PHY	III	Programming with C & C++	3.49

256	PHY	III	Practical - Digital Principles	4.87
257	PHY	III	Practical - Electronics I	4.70
258	PHY	III	Prac. Programming with C & C++	4.79
259	PHY	III	Elective - Quantum Mechanics & Relativity	4.11
260	PHY	II	Electricity and Magnetism	3.62
261	PHY	II	Allied - Chemistry I	3.16
262	PHY	II	Practical - Electricity & Magnetism	4.58
263	PHY	II	Practical - Chemistry I	4.48
264	PHY	II	SBE5: Physics for Compititive Exam	3.08
265	PHY	II	Part I - Tamil	3.48
266	PHY	II	Part II - English	3.40
267	PHY	I	Principles of Matter and Acoutics	4.74
268	PHY	I	Allied - Mathematics I	3.30
269	PHY	I	Part I - Tamil	3.64
270	PHY	I	Part II - English	3.91
271	TAE	III	Bakthi Ilakkiyam	2.81
272	TAE	III	Ilakkanam Yappu	3.19
273	TAE	III	Kappiyam	2.76
274	TAE	III	Mozhipeyarppukkalai	3.14
275	TAE	III	Sitrilakkiyam	2.95
276	TAE	III	Ilakkiaya Thiranaivu	3.27
277	TAE	II	Ilakkanam, Porul, Akam	2.41
278	TAE	II	Allied - Ikkala Ilakkiyam	2.66
279	TAE	II	SBE5: Naadagakkalai	2.31
280	TAE	II	Part I - Tamil	2.02
281	TAE	II	Part II - English	1.61
282	TAE	I	Naanool Ezhuthu	2.47
283	TAE	I	Allied - Ikkala Ilakkiyam	2.64
284	TAE	I	Part I - Tamil	2.61
285	TAE	I	Part II - English	3.17
286	VCE	III	Arts and Visual Aesthetics	3.11
287	VCE	III	Basic Visual Journalism	2.56
288	VCE	III	Practical - Intro. to 2D Animation	3.64
289	VCE	III	Prac. - Media Rsearch Methods & Application	2.22
290	VCE	III	Practical - Radio Production	2.78
291	VCE	III	Elect-Pract. Television Production	4.03
292	VCE	II	Practical - Photography	3.36
293	VCE	II	Allied - Advertising Creativity	2.58
294	VCE	II	SBE4: Practical - New Wave Cinima	4.42
295	VCE	II	Part I - Tamil	2.00
296	VCE	II	Part II - English	2.61
297	VCE	I	Human Communication	2.56
298	VCE	I	Pract. Visual Literacy & Graphic Design	3.49
299	VCE	I	Part I - Tamil	1.90
300	VCE	I	Part II - English	2.66

301	ZOO	III	Biochemistry	3.14
302	ZOO	III	Developmental Biology	2.81
303	ZOO	III	Ecology & Evolutionary Biology	2.79
304	ZOO	III	Genetics & Animal Biotechnology	2.81
305	ZOO	III	Prac. Biochemistry	3.84
306	ZOO	III	Prac. Developmental Biology	3.33
307	ZOO	III	Prac. Ecology & Evolutionary Biology	3.53
308	ZOO	III	Prac. Genetics & Animal Biotechnology	3.53
309	ZOO	III	Elective - Intro. to Bioinformatics	2.70
310	ZOO	II	Cell and Molecular Biology	3.51
311	ZOO	II	Allied - Plant Diverstity	2.44
312	ZOO	II	Prac. Cell and Molecular Biology	3.35
313	ZOO	II	Prac. Allied - Plant Diverstity	2.91
314	ZOO	II	SBE5: Apiculture	3.53
315	ZOO	II	Part I - Tamil	3.60
316	ZOO	II	Part II - English	2.88
317	ZOO	I	Invertabrata	2.87
318	ZOO	I	Allied - Chemistry I	2.74
319	ZOO	I	Practical - Invertabrata	3.13
320	ZOO	I	Practical - Allied - Chemistry I	2.74
321	ZOO	I	Part I - Tamil	3.30
322	ZOO	I	Part II - English	3.72

2.6.2. Distribution of Courses across Under Graduate Programmes offered at St. Xavier's College by attainment of Course Outcome (Excluding Languages)

S. No.	Department	Year	Course	Mean
1	MAE	III	Practical C++	5.00
2	MAE	I	Allied - Practical - Physics I	5.00
3	MAT	I	Allied - Practical - Physics I	4.98
4	CHE	III	Pr. Preparation of Organic Comp.	4.96
5	CHE	II	Pr. Organic Qualitative Analysis I	4.96
6	CHE	III	Pr. Preparation of Coordination Compounds	4.94
7	CHE	III	Prac. Inorganic Gravimetric Estimation	4.91
8	MAT	III	Practical - Python	4.90
9	PHY	III	Practical - Digital Principles	4.87
10	MAE	III	Abstract Algebra	4.80
11	PHY	III	Prac. Programming with C & C++	4.79
12	BBA	II	Practical - Computer App	4.77
13	CHE	II	Allied - Practical - Physics I	4.77
14	PHY	I	Principles of Matter and Acoutics	4.74
15	CHE	III	Prac. Estimation of Organic Compounds	4.72
16	CHE	I	Prac. Inorganic Volumetric Est I	4.70
17	PHY	III	Practical - Electronics I	4.70
18	CSC	I	Practical - Programming in C	4.65
19	CSE	III	Practical - HTML and XML	4.59
20	PHY	II	Practical - Electricity & Magnetism	4.58
21	MAE	III	C++	4.56
22	COM	III	Practical - Oracle	4.55
23	CAS	II	Practical - C Programming	4.52
24	COE	III	Practical - Oracle	4.52
25	PHY	II	Practical - Chemistry I	4.48
26	CSE	II	Prac. Numerical Methods	4.45
27	MAT	III	Elective - Linear Programming & Game Theory	4.43
28	VCE	II	SBE4: Practical - New Wave Cinima	4.42
29	CSC	II	Prac. Numerical Methods	4.39
30	MAE	III	Elective - Linear Programming & Game Theory	4.37
31	MAT	III	Abstract Algebra	4.37
32	MAE	III	Differential Equation & Fourier Series	4.34
33	MAT	II	Statistics I	4.31
34	COE	II	Practical - Accounting Packages	4.27
35	MAE	II	SBE5: Techniques of Reasoning	4.25
36	MAT	III	Python	4.25

37	**MAE**	**II**	**Statistics I**	**4.23**
38	**COE**	**III**	**Prac. Internet & Web Design**	**4.19**
39	**COM**	**III**	**Income Tax Law & Practices**	**4.19**
40	**CSC**	**III**	**Practical - HTML and XML**	**4.19**
41	**CAS**	**I**	**Practical - Computer Fundamentals**	**4.17**
42	**COM**	**II**	**Practical - Accounting Packages**	**4.12**
43	**MAT**	**II**	**Sequences and Series**	**4.12**
44	**PHY**	**III**	**Elective - Quantum Mechanics & Relativity**	**4.11**
45	**CSE**	**III**	**Prac. Operating System Routines**	**4.07**
46	**CSE**	**III**	**Prac. Programming in ASP Dot Net**	**4.05**
47	**VCE**	**III**	**Elect-Pract. Television Production**	**4.03**
48	**CCS**	**III**	**Cost Accounting**	**4.02**
49	**COE**	**III**	**Oracle**	**4.00**
50	**MAE**	**II**	**Sequences and Series**	**4.00**
51	CSC	III	Prac. Operating System Routines	3.98
52	MAT	I	Allied - Physics I	3.98
53	CCS	III	Auditing	3.96
54	COE	II	Allied - Business Mathematics	3.96
55	PHY	III	Digital Principles	3.96
56	COE	III	Contemporary Banking	3.93
57	CCS	III	Summer Internship	3.92
58	CCS	III	Elective-Marketing Mangement	3.91
59	COM	III	Oracle	3.90
60	CAS	II	Allied-Business Mathematics	3.89
61	COE	III	Elective - Prac. - VB.NET	3.89
62	COM	II	Accounting Packages	3.89
63	COM	II	Allied - Business Mathematics	3.89
64	COM	I	Financial Accounting	3.89
65	CAS	I	Allied - Computer Fundamentals	3.86
66	CSE	II	Prac. Data Structures & Algorithm	3.86
67	ENG	III	Elective - English for Career	3.86
68	BOT	III	Practical - Ecology	3.85
69	CHE	III	Inorganic Chemistry III	3.85
70	COE	III	Internet & Web Design	3.85
71	COE	II	Accounting Packages	3.85
72	CSC	II	Prac. Data Structures & Algorithm	3.84
73	ZOO	III	Prac. Biochemistry	3.84
74	MAT	I	Differential & Integral Calculus	3.83
75	COM	III	Prac. Internet & Web Design	3.80
76	COM	III	Elective - Prac. - VB.NET	3.80
77	CAS	II	Practical - Accounting Packages	3.79
78	MAT	III	Differential Equation & Fourier Series	3.78

79	MAT	III	Modern Analysis	3.78
80	CCS	I	Fundamentals of Accounting	3.77
81	CCS	III	Corporate Secretarial	3.75
82	MAE	I	Differential & Integral Calculus	3.75
83	PHY	III	Electronics I	3.74
84	BOT	II	Prac. Anotomy & Embryology	3.73
85	COM	III	Human Resource Mangement	3.73
86	COM	III	Elective - Logistics Mgt.	3.73
87	MAE	I	Allied - Physics I	3.73
88	COM	III	Contemporary Banking	3.71
89	CAS	II	Accounting Packages	3.69
90	COE	III	Cost Accounting	3.67
91	MAT	II	SBE5: Bio-Informatics	3.67
92	BBA	III	Internship Training	3.66
93	CSE	II	Practical - Programming in JAVA	3.66
94	CSE	II	Allied-Numerical Methods with Algorithm	3.66
95	BOT	III	Practical - Biochemistry	3.65
96	CAS	II	C Programming	3.65
97	CSE	III	Practical - PHP and MySQL	3.64
98	VCE	III	Practical - Intro. to 2D Animation	3.64
99	COE	III	Human Resource Mangement	3.63
100	PHY	II	Electricity and Magnetism	3.62
101	ENE	III	American Literature	3.61
102	BBA	II	Allied - Computer Application	3.59
103	BOT	I	Prac. Chemistry1	3.59
104	COE	II	SBE5: Online Trading & Demat Operations	3.58
105	ENG	II	Allied - Spoken English	3.57
106	COE	II	Business Accounting	3.56
107	ENG	III	British Literature IV	3.56
108	CSE	I	Practical - Programming in C	3.55
109	CHE	II	Allied - Physics I	3.53
110	PHY	III	Nuclear Physics	3.53
111	ZOO	III	Prac. Ecology & Evolutionary Biology	3.53
112	ZOO	III	Prac. Genetics & Animal Biotechnology	3.53
113	ZOO	II	SBE5: Apiculture	3.53
114	COE	III	Income Tax Law & Practices	3.52
115	COE	III	Elective - VB.NET	3.52
116	ENG	III	British Literature III	3.52
117	BBA	II	Managerial Economics	3.51
118	ZOO	II	Cell and Molecular Biology	3.51
119	PHY	III	Programming with C & C++	3.49
120	VCE	I	Pract. Visual Literacy & Graphic Design	3.49

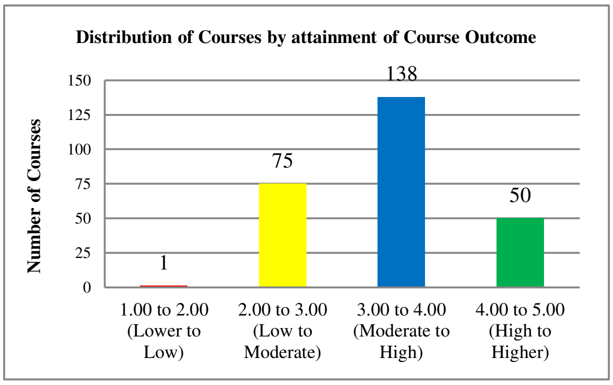
121	CSC	III	Practical - PHP and MySQL	3.47
122	ENG	III	American Literature	3.47
123	ENG	III	Diaspora Literature	3.47
124	COM	II	Business Accounting	3.44
125	CSE	III	PHP and MySQL	3.43
126	CCS	III	Income Tax	3.42
127	COM	I	Allied-Business Economics	3.42
128	ECO	II	SBE5: Data Collection & Presentation	3.41
129	COM	III	Customer Relationship	3.40
130	COM	III	Internet & Web Design	3.40
131	ENE	III	Diaspora Literature	3.37
132	VCE	II	Practical - Photography	3.36
133	COM	III	Elective - VB.NET	3.35
134	ENE	III	British Literature III	3.35
135	ZOO	II	Prac. Cell and Molecular Biology	3.35
136	CCS	II	Company Law	3.34
137	CAS	I	Financial Accounting	3.33
138	ZOO	III	Prac. Developmental Biology	3.33
139	CSC	III	Prac. Programming in ASP Dot Net	3.32
140	BBA	I	Financial Accounting	3.31
141	BBA	III	Business Ethics	3.30
142	CHE	III	Elective - Biomolecules	3.30
143	PHY	I	Allied - Mathematics I	3.30
144	CCS	II	SBE5: Stakeholders & Governance	3.29
145	COM	III	Cost Accounting	3.28
146	TAE	III	Ilakkiaya Thiranaivu	3.27
147	CHE	III	Physical Chemistry II	3.26
148	CSC	III	Web Designing	3.26
149	CCS	I	Allied-Business Org. & Mgt.	3.25
150	COE	II	Commercial Law	3.24
151	ENG	I	Indian Writing in English	3.24
152	CAS	II	On the Job Training	3.23
153	CHE	III	Physical Chemistry I	3.23
154	COE	I	Allied-Business Economics	3.23
155	COE	I	Financial Accounting	3.22
156	ENE	III	British Literature IV	3.22
157	BOT	III	Cell Biology	3.21
158	CHE	II	Inorganic Chemistry II	3.21
159	COE	III	Customer Relationship	3.19
160	COE	III	Elective - Logistics Mgt.	3.19
161	TAE	III	Ilakkanam Yappu	3.19
162	BBA	III	Elective Case Analysis	3.18

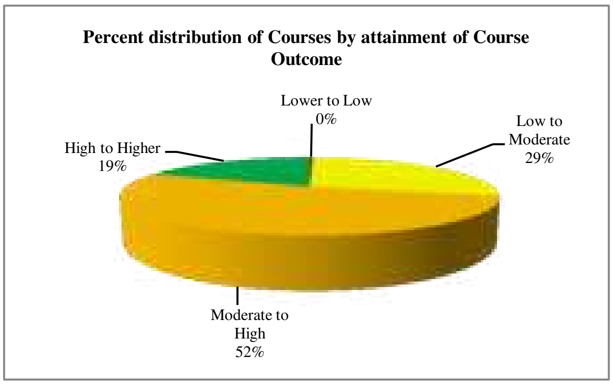
163	PHY	II	Allied - Chemistry I	3.16
164	CAS	II	Business Accounting	3.15
165	CHE	II	SBE5: Material Science	3.15
166	CSE	III	Programming in ASP Dot Net	3.14
167	CSE	II	Programming in JAVA	3.14
168	TAE	III	Mozhipeyarppukkalai	3.14
169	ZOO	III	Biochemistry	3.14
170	ZOO	I	Practical - Invertabrata	3.13
171	BOT	II	Anotomy & Embryology	3.12
172	BOT	II	Prac.Animal Structure & Function	3.12
173	ENE	II	Allied - Spoken English	3.12
174	CSE	III	Web Designing	3.11
175	VCE	III	Arts and Visual Aesthetics	3.11
176	CSC	II	Practical - Programming in JAVA	3.10
177	ENG	II	British Literature I	3.10
178	MAE	III	Modern Analysis	3.10
179	CSE	III	Operating System	3.09
180	ENG	III	Literary Theory and Criticism	3.09
181	CSE	I	Programming in C	3.08
182	PHY	II	SBE5: Physics for Compititive Exam	3.08
183	CSC	II	Programming in JAVA	3.06
184	PHY	III	Fiber Optics	3.04
185	BBA	II	Marketing Management	3.03
186	BBA	II	SBE 5: Steping into a Business	3.02
187	ENE	III	Literary Theory and Criticism	3.02
188	BOT	II	Animal Structure and Function	3.00
189	**ENG**	**II**	**SBE5: Skills of Interpretation of Poetry**	**2.97**
190	**COM**	**II**	**SBE5: Online Trading & Demat Operations**	**2.96**
191	**CSC**	**III**	**PHP and MySQL**	**2.96**
192	**TAE**	**III**	**Sitrilakkiyam**	**2.95**
193	**CCS**	**II**	**Business Organisation & Mgt.**	**2.94**
194	**CSC**	**II**	**SBE5: Practical Visual Basic**	**2.94**
195	**ENE**	**III**	**Elective - English for Career**	**2.93**
196	**CSE**	**I**	**Allied Digital Principles & Computer Architecture**	**2.92**
197	**ENG**	**I**	**Literary Forms and Terms**	**2.92**
198	**CHE**	**I**	**Inorganic Chemistry I**	**2.91**
199	**ZOO**	**II**	**Prac. Allied - Plant Diverstity**	**2.91**
200	**BOT**	**I**	**Plant Diversity**	**2.90**
201	**CCS**	**II**	**Business Statistics**	**2.90**
202	**CSE**	**II**	**SBE5: Practical - Visual Basic**	**2.89**
203	**BOT**	**III**	**Elective - Biological Techniques**	**2.88**
204	**BOT**	**II**	**SBE 5: Herbal Botany**	**2.88**

205	ZOO	I	Invertabrata	2.87
206	CHE	I	Allied-Mathematics I	2.84
207	COM	II	Commercial Law	2.84
208	CSC	II	Data Structures & Algorithm	2.84
209	TAE	III	Bakthi Ilakkiyam	2.81
210	ZOO	III	Developmental Biology	2.81
211	ZOO	III	Genetics & Animal Biotechnology	2.81
212	CSC	II	Allied-Numerical Methods with Algorithm	2.80
213	CSC	III	Operating System	2.79
214	ZOO	III	Ecology & Evolutionary Biology	2.79
215	VCE	III	Practical - Radio Production	2.78
216	CSC	III	Programming in ASP Dot Net	2.77
217	TAE	III	Kappiyam	2.76
218	BBA	I	Principles of Management	2.75
219	BOT	III	Biochemistry & Biophysics	2.74
220	BOT	I	Allied - Chemistry1	2.74
221	ZOO	I	Allied - Chemistry I	2.74
222	ZOO	I	Practical - Allied - Chemistry I	2.74
223	BBA	III	Organisational Behaviour	2.72
224	BBA	II	Banking and Insurance	2.72
225	CHE	III	Organic Chemistry III	2.70
226	ECO	I	Allied - Mathematics I	2.70
227	ZOO	III	Elective - Intro. to Bioinformatics	2.70
228	CSE	II	Data Structures & Algorithm	2.68
229	CSC	I	Programming in C	2.67
230	BBA	III	Business Legislations	2.66
231	TAE	II	Allied - Ikkala Ilakkiyam	2.66
232	BBA	III	Logistics Management	2.64
233	TAE	I	Allied - Ikkala Ilakkiyam	2.64
234	CAS	II	SBE 5: Online Trading & Demat Operations	2.63
235	BOT	III	Practical - Cellbiology	2.59
236	ECO	III	Elective - Statistics II	2.58
237	VCE	II	Allied - Advertising Creativity	2.58
238	VCE	III	Basic Visual Journalism	2.56
239	VCE	I	Human Communication	2.56
240	BOT	III	Microbiology & Plant Biology	2.53
241	BOT	I	Prac. Plant Diversity	2.51
242	ENE	I	Indian Writing in English	2.49
243	TAE	I	Naanool Ezhuthu	2.47
244	CSC	III	Elective - Software Engineering	2.45
245	ZOO	II	Allied - Plant Diverstity	2.44
246	ENE	II	SBE5: Skill of Interpretation of Poetry	2.42

247	TAE	II	Ilakkanam, Porul, Akam	2.41
248	BOT	III	Ecology	2.38
249	CSC	I	Allied Digital Principles & Computer Architecture	2.31
250	TAE	II	SBE5: Naadagakkalai	2.31
251	CSE	III	Elective - Software Engineering	2.30
252	CCS	II	Corporate Accounting	2.29
253	BBA	III	Financial Management	2.26
254	VCE	III	Prac. - Media Rsearch Methods & Application	2.22
255	ENE	II	British Literature I	2.21
256	ECO	I	Micro Economics I	2.16
257	ECO	III	History of Economic Thought	2.15
258	ECO	III	Fiscal Economics	2.13
259	ECO	III	Macro Economics	2.13
260	ECO	II	History of Indian Freedom Movement	2.13
261	ECO	III	Indian Economic Development	2.10
262	ENE	I	Literary Forms and Terms	2.09
263	ECO	III	Money and Banking	2.02
264	ECO	II	International Economics	1.91

Consolidation of attainment of course outcome presented in the above table is graphically portrayed as bar diagram and pie chart hereunder.



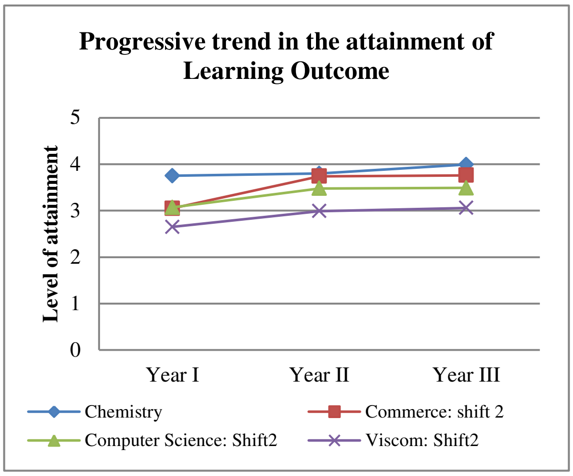


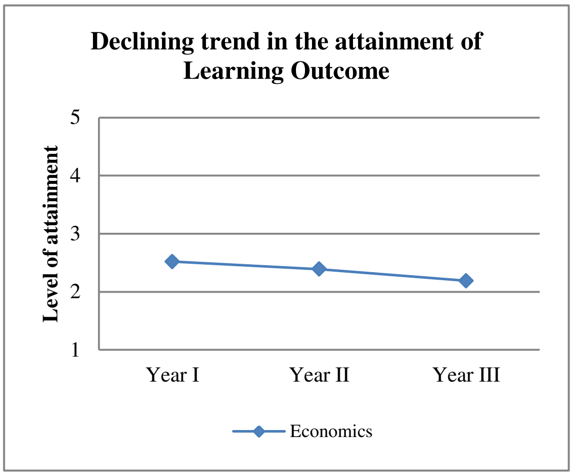
The average level of attainment of undergraduate course outcome (excluding languages) for the entire college is 3.42 out of 5.00 which falls between Moderate and High.

Attainment of Programme Specific Outcome

S. No.	Department	Overall Couse Outcome Across Years			Programme Specific Outcome
		I	II	III	
1	**B.Sc. Mathematics (Shift1)**	**4.24**	**3.90**	**4.25**	**4.13**
2	**B.Sc. Mathematics (Shift2)**	**3.95**	**3.87**	**4.36**	**4.06**
3	**B.Sc. Physics (Shift1)**	**3.90**	**3.69**	**4.03**	**3.87**
4	**B.Sc. Chemistry (Shift1)**	**3.74**	**3.80**	**3.99**	**3.84**
5	**B.Com. (Shift1)**	**3.63**	**3.52**	**3.74**	**3.63**
6	B.Com. Additional (Shift2)	3.52	3.57		3.55
7	B.Com. (Shift2)	3.05	3.74	3.76	3.52
8	B.A. English (Shift1)	3.37	3.24	3.50	3.37
9	B.Sc. Computer Science (Shift2)	3.07	3.48	3.49	3.35
10	B.Com. Corporate Secretaryship (Shift2)	3.25	2.95	3.83	3.34
11	B.Sc. Computer Science (Shift1)	3.24	3.28	3.24	3.25
12	B.Sc. Zoology (Shift1)	3.08	3.17	3.16	3.14
13	BBA (Shift2)	2.89	3.44	2.92	3.08
14	B.Sc. Botany (Shift1)	3.06	3.14	2.98	3.06
15	**B.A. English (Shift2)**	**2.75**	**2.73**	**3.25**	**2.91**
16	**B.Sc. Visual Communication (Shift2)**	**2.65**	**2.99**	**3.06**	**2.90**
17	**B.A. Tamil (Shift2)**	**2.72**	**2.20**	**3.02**	**2.65**
18	**B.A. Economics (Shift1)**	**2.52**	**2.39**	**2.19**	**2.37**

From the above table it is observed that students of the 5 top placed programmes had attained the learning objectives at the range of 3.63 to 4.13, a high level of attainment whereas the students of those bottom placed 4 programmes had attained their learning objectives at a relatively lower level between 2.37 and 2.91, which is below moderate level. It's also found that a high level attainment of specific programme outcome account to Mathematics of shift 1 and shift 2 with a mean score of 4.13 and 4.06 respectively. Among the top achieving programmes, four (B.Sc. Maths-Shift1, B.Sc. Maths Shift2, B.Sc. Physics and B.Sc. Chemistry) belong to the science stream while the only Arts programme is B.Com. of Shift 1. And, the most of the low achieving programmes are from the Arts stream. Hence it could be concluded. Students of Science disciples had obtained better learning outcome when compared to the students of Arts disciplines.

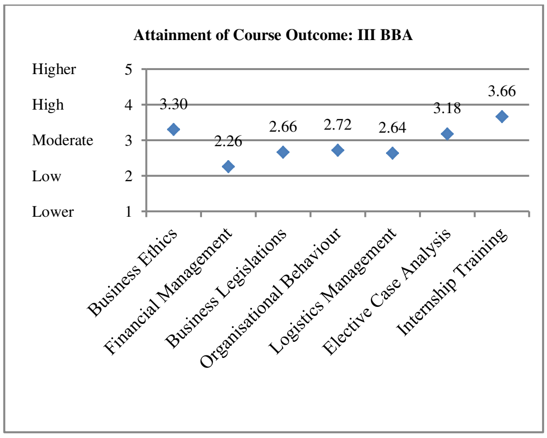


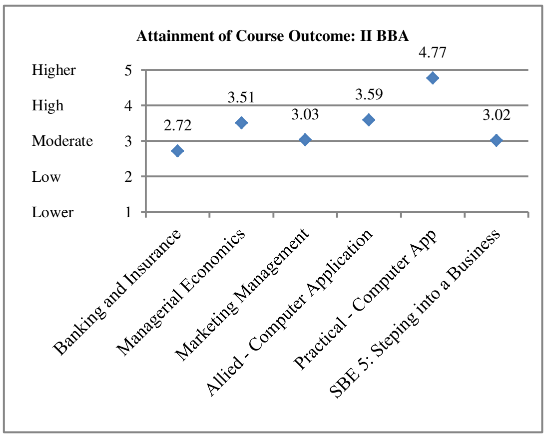


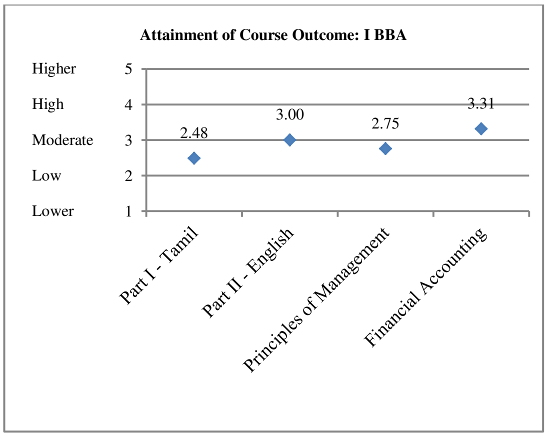
The above line graph shows that the students of B.Sc. Chemistry, B.Com of Shift 2, Computer Science of Shift 2 and B.Sc. Visual Communication of Shift 2 are attaining their learning objective as they progress year by year. But, the students of B.A. Economics show a declining trend in the attainment of learning objectives as they progress to higher levels.

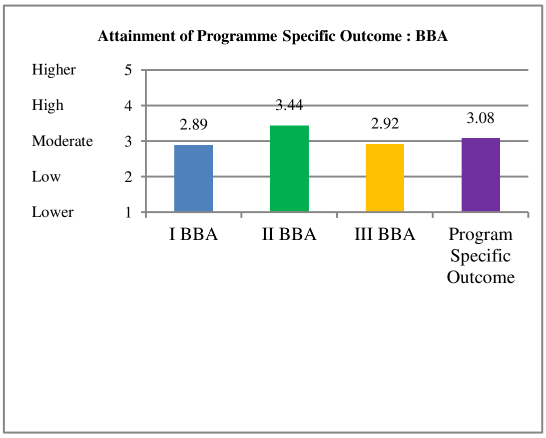
Further, the attainment of course outcome is clearly shown as graphs for each department. By looking at these portrayals, the teaching students, teaching faculty and management can easily understand level of attainment learning objectives and subsequently evolve strategic planning for further improvements.

Department of BBA

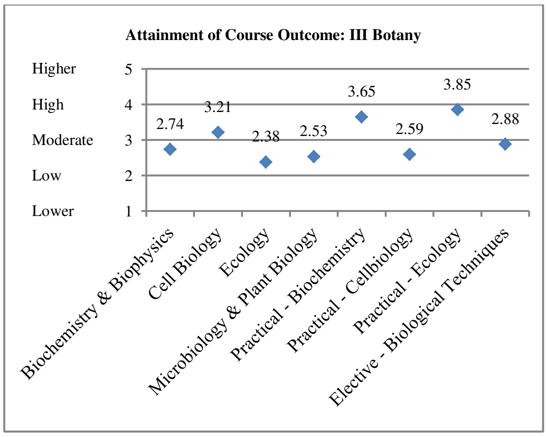


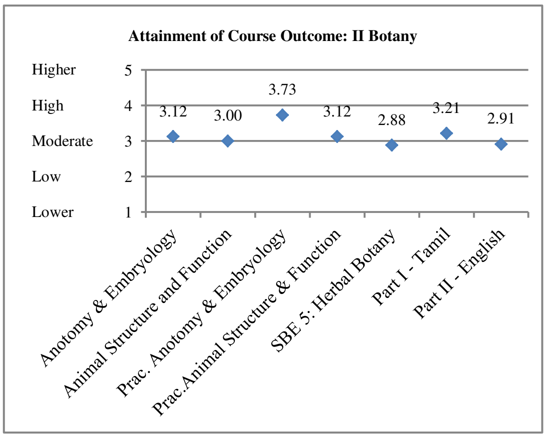


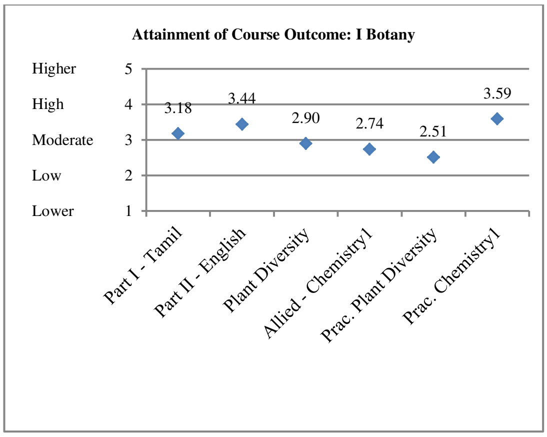


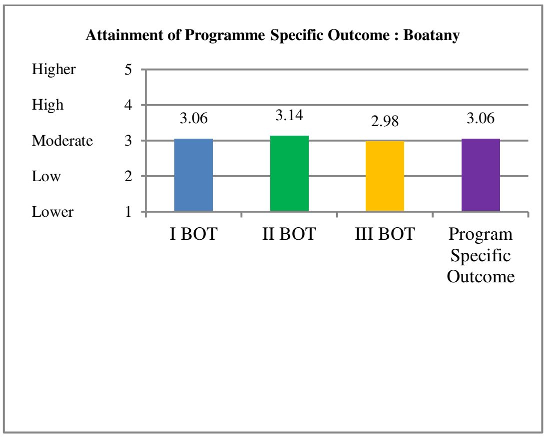


Department of Botany

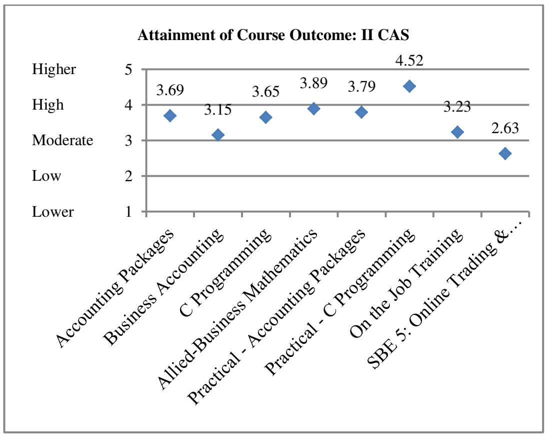


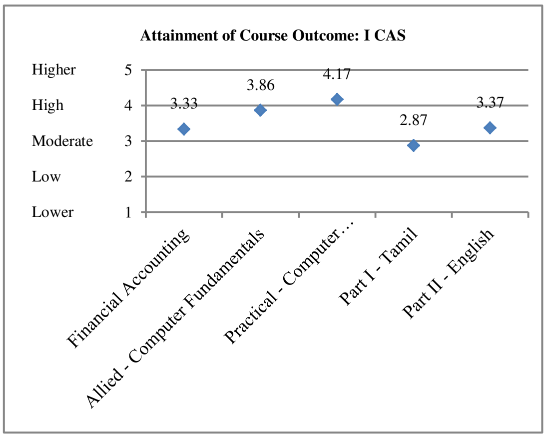


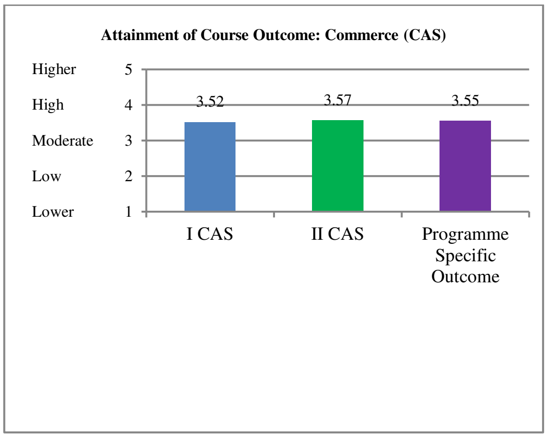




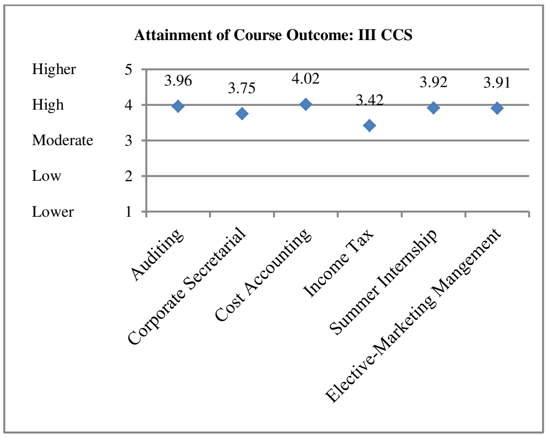
Department of Commerce Additional (CAS)

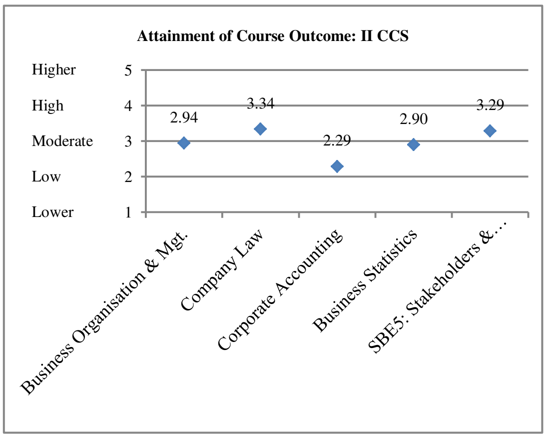


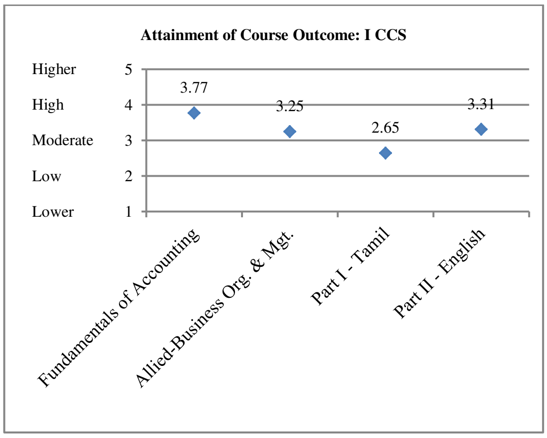


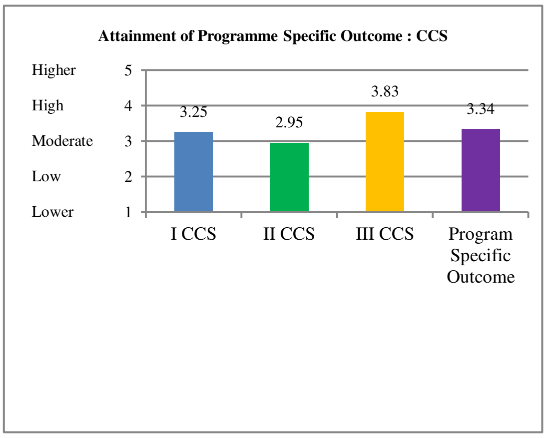


Department of Corporate Secretaryship (CCS)

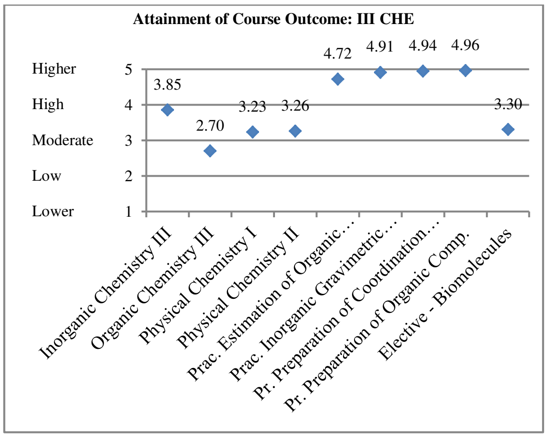


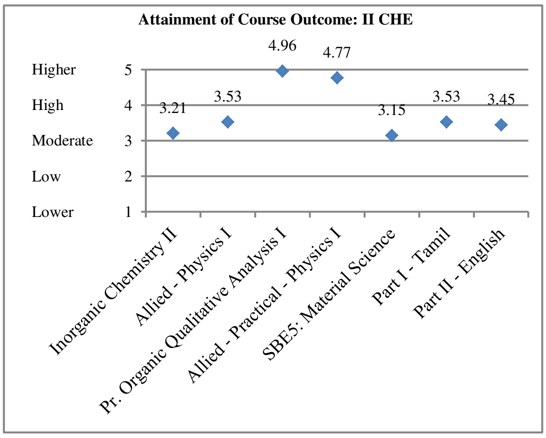


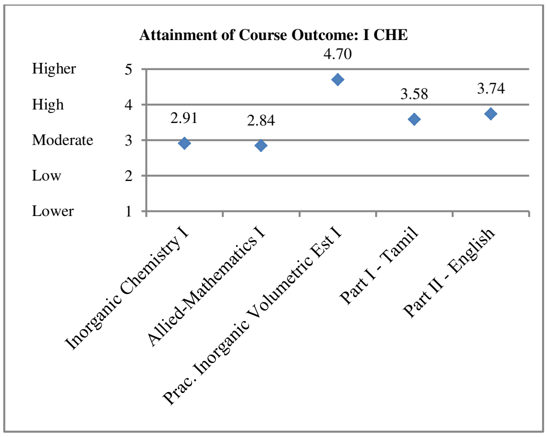


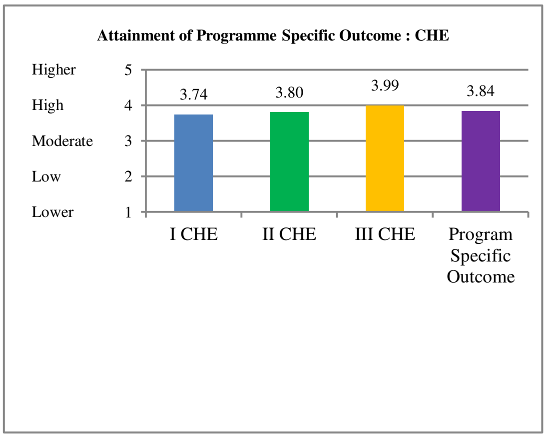


Department of Chemistry (CHE)

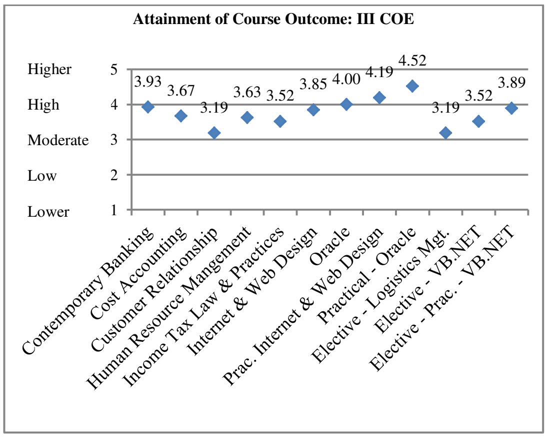


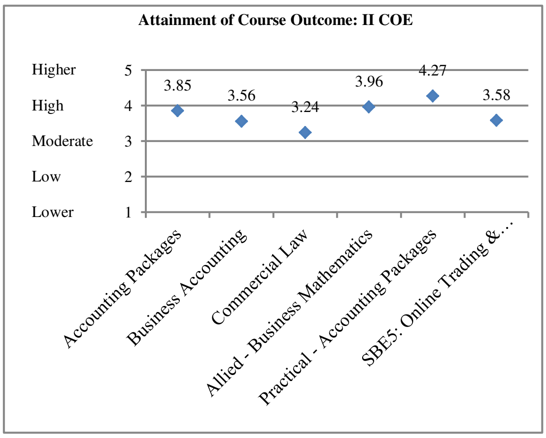


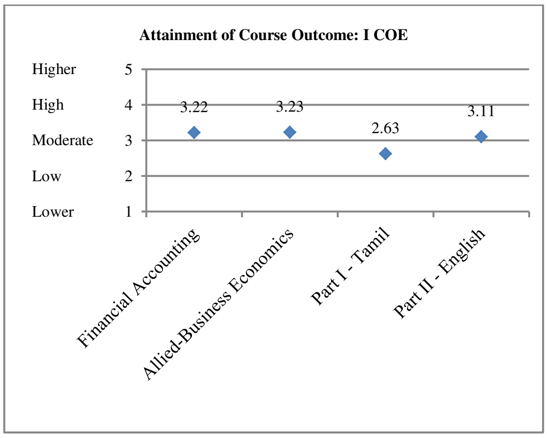


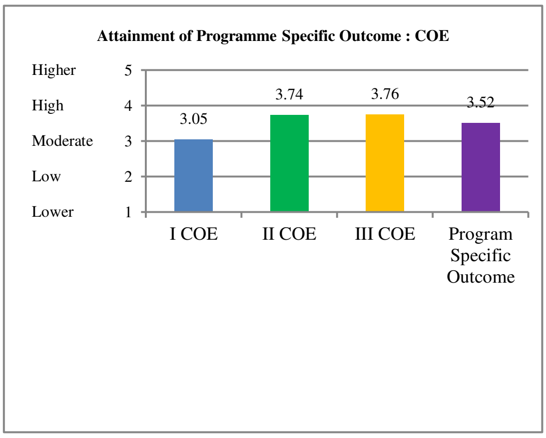


Department of Commerce II (COE)

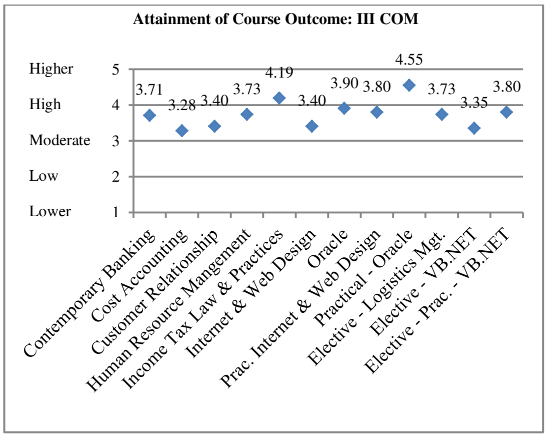


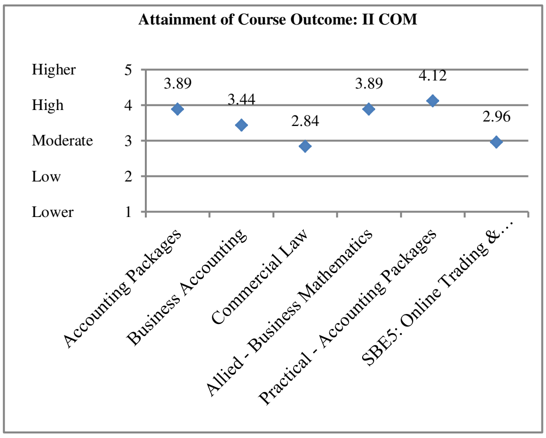


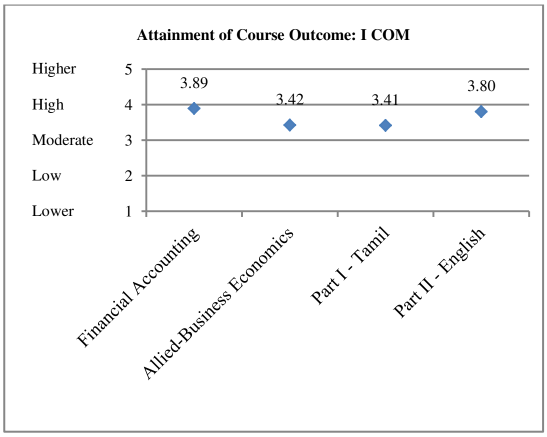


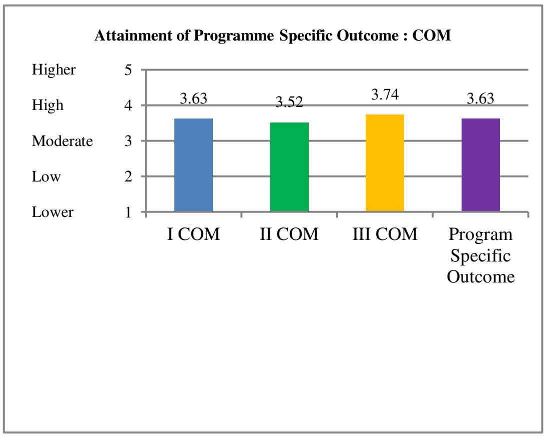


Department of Commerce I (COM)

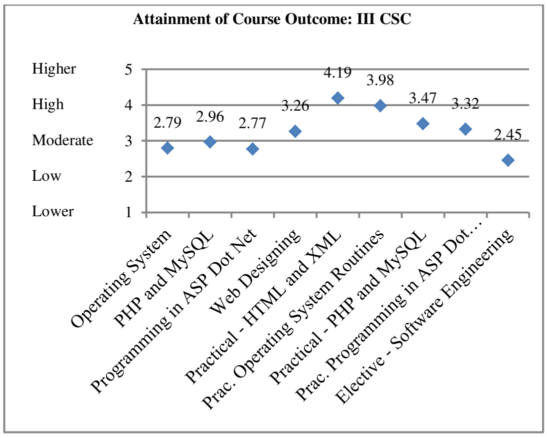


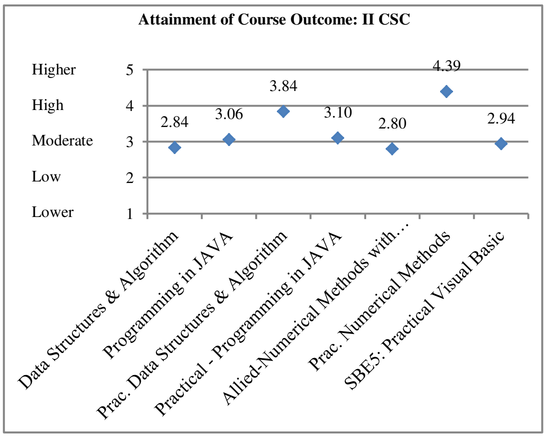


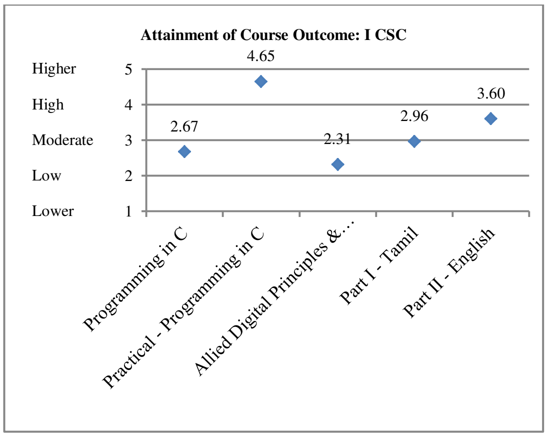


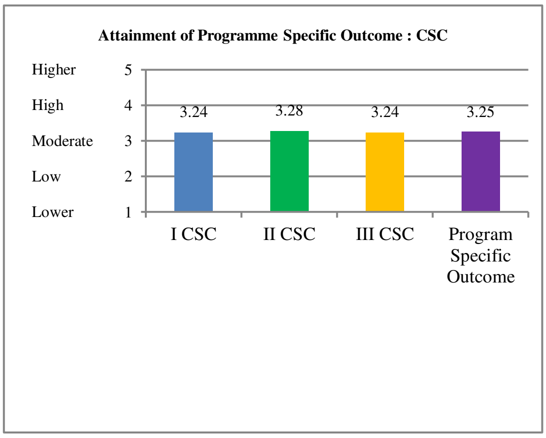


Department of Computer Science I (CSC)

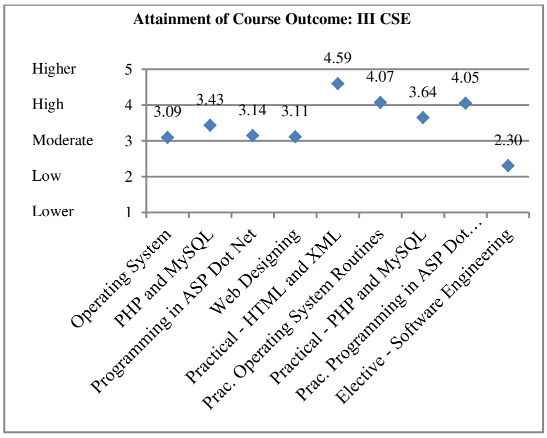


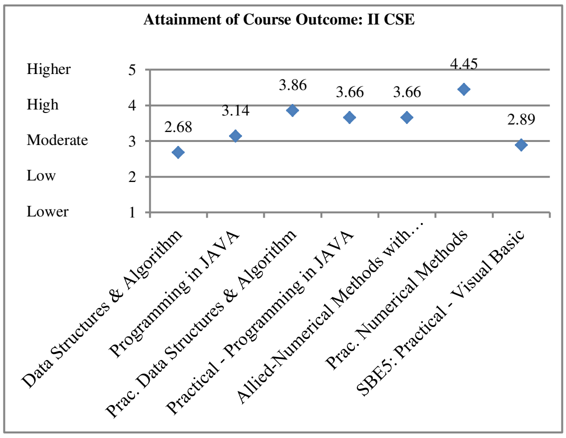


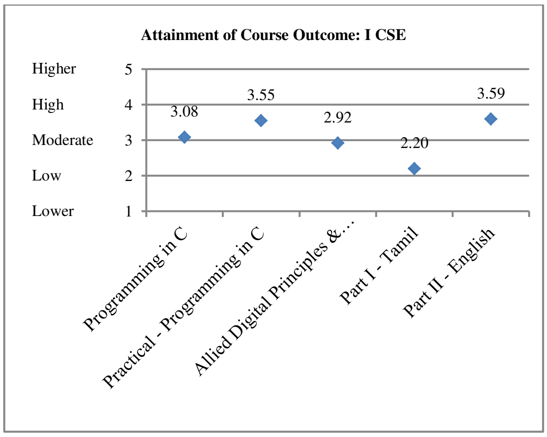


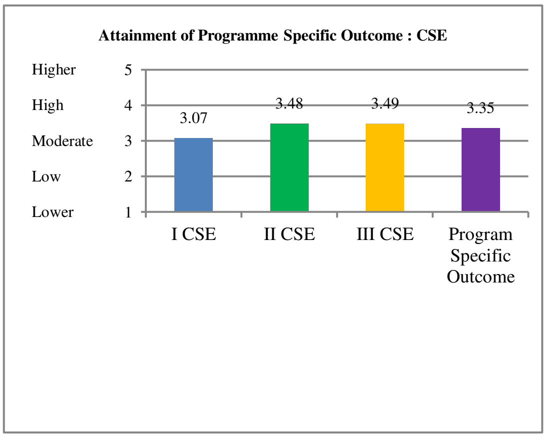


Department of Computer Science II (CSE)

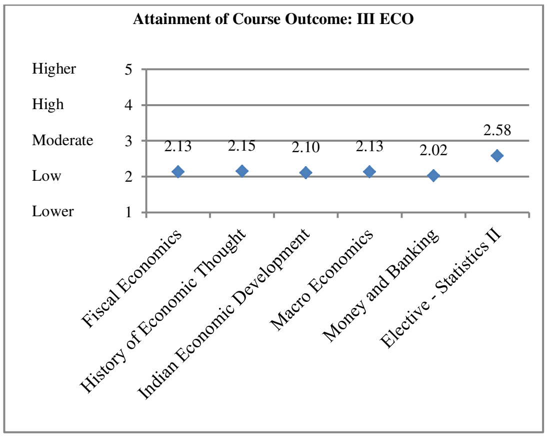


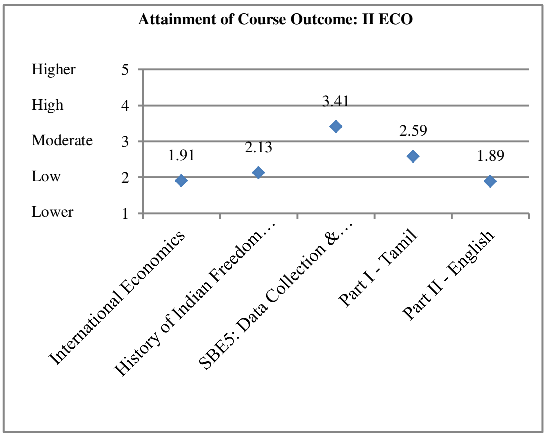


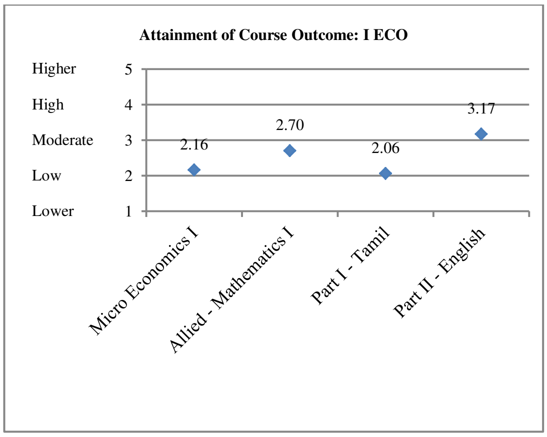


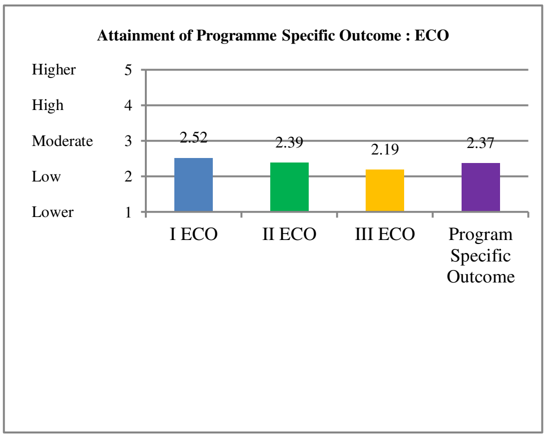


Department of Economics (ECO)

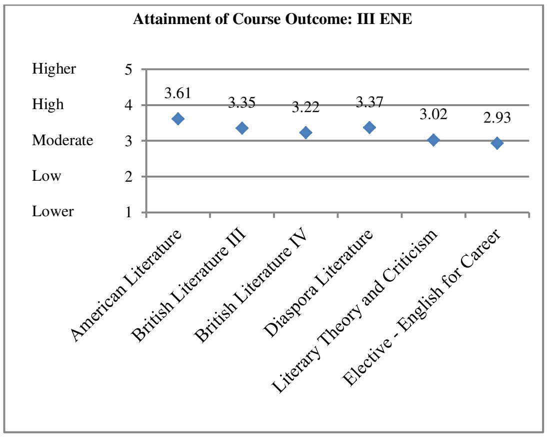


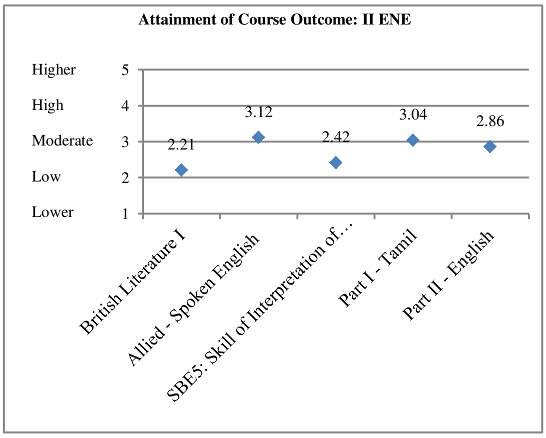


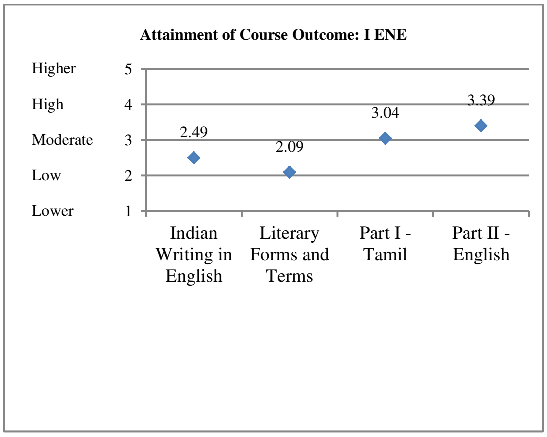


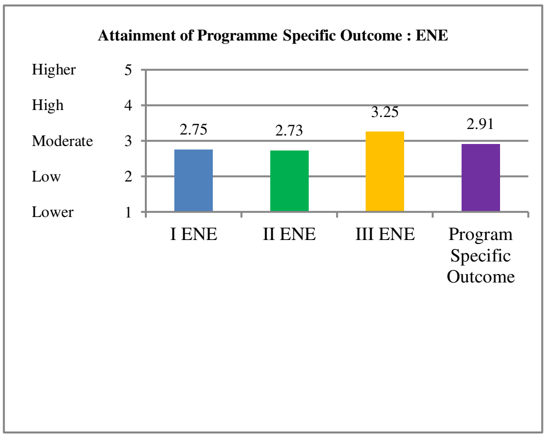


Department of English II (ENE)

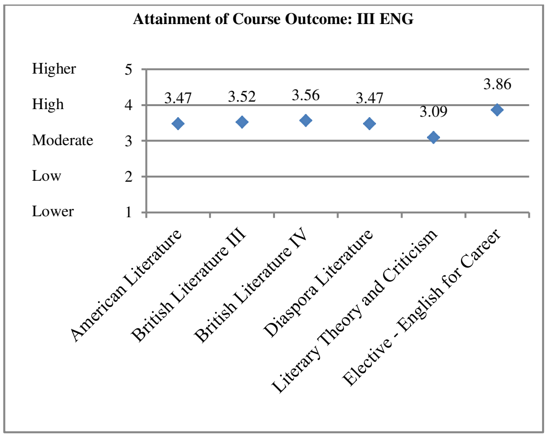


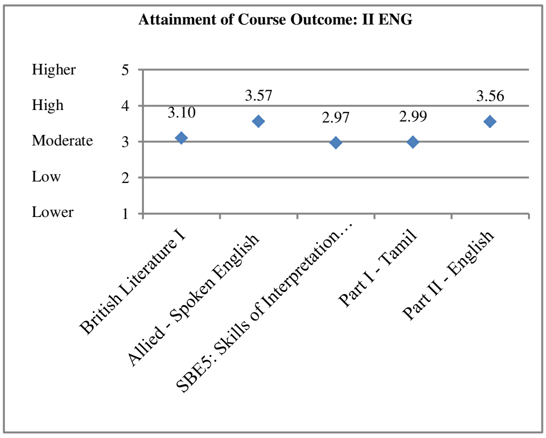


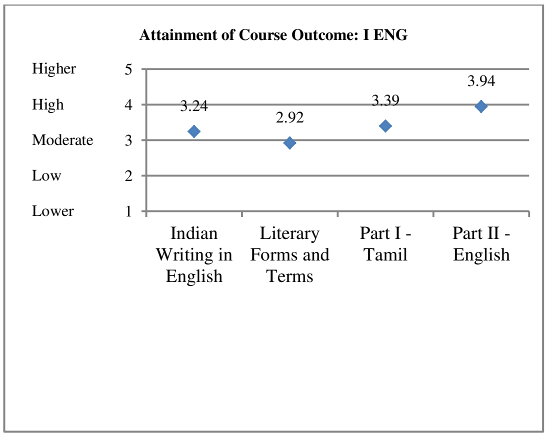


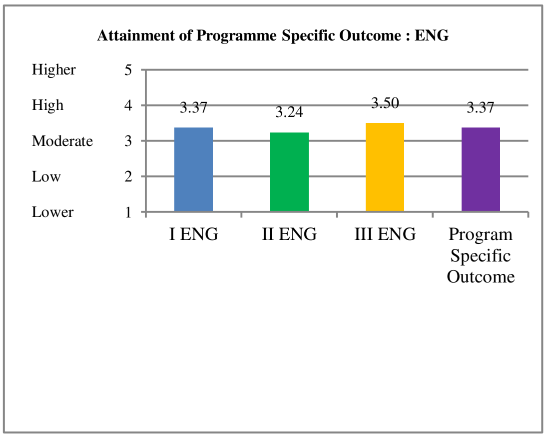


Department of English I (ENG)

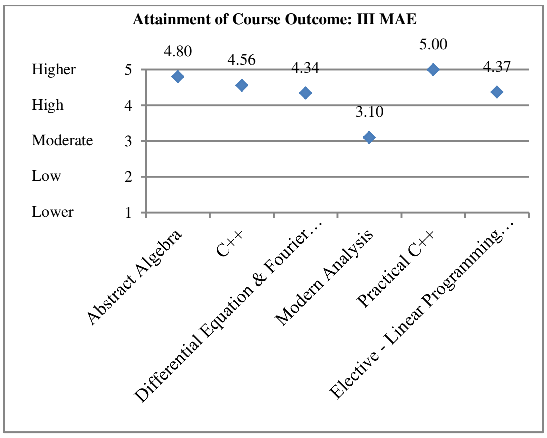


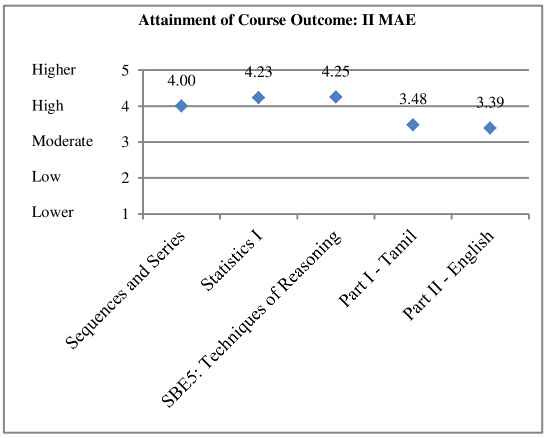


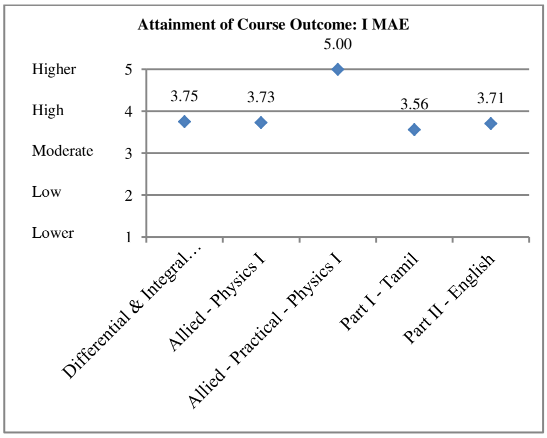


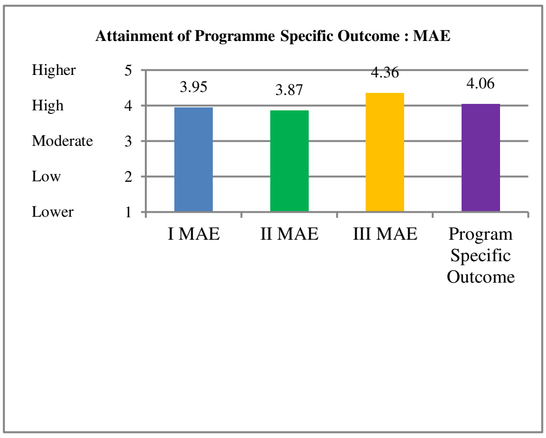


Department of Mathematics II (MAE)

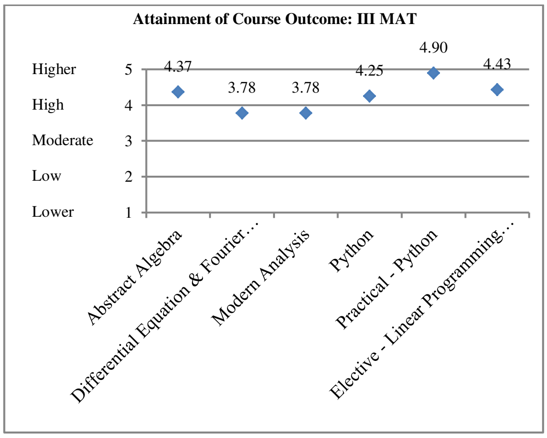


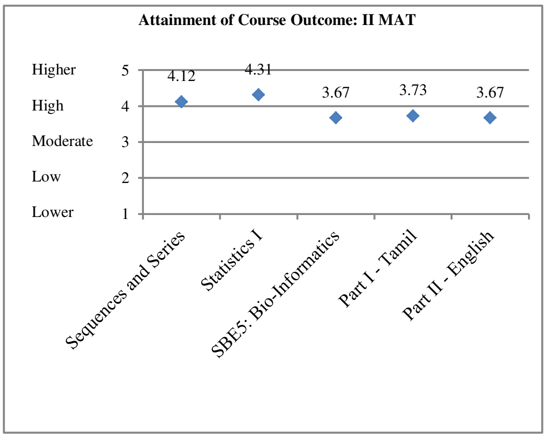


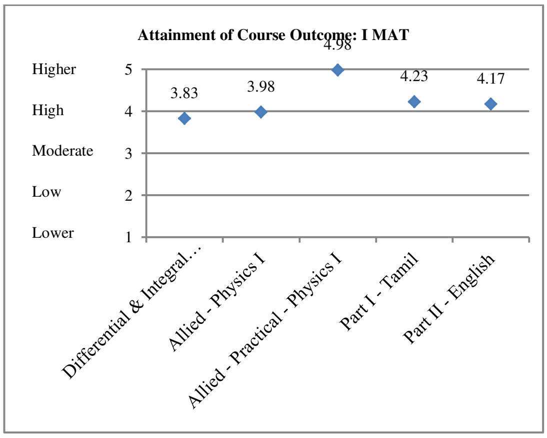


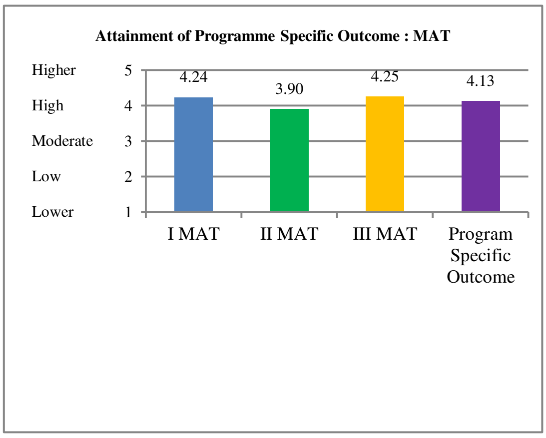


Department of Mathematics I (MAT)









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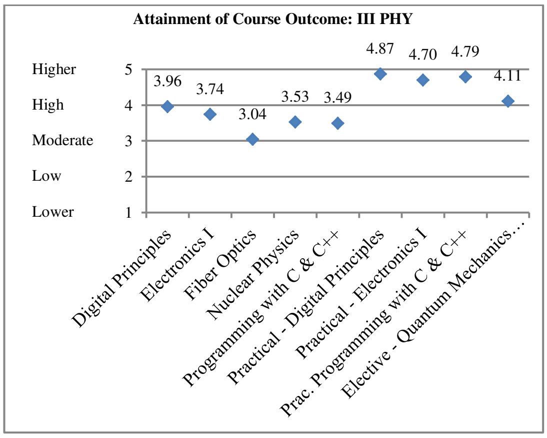
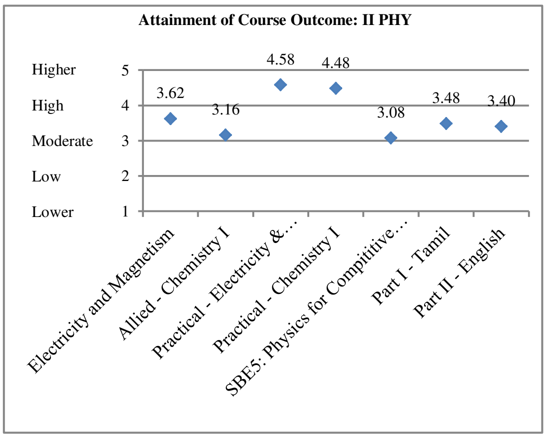
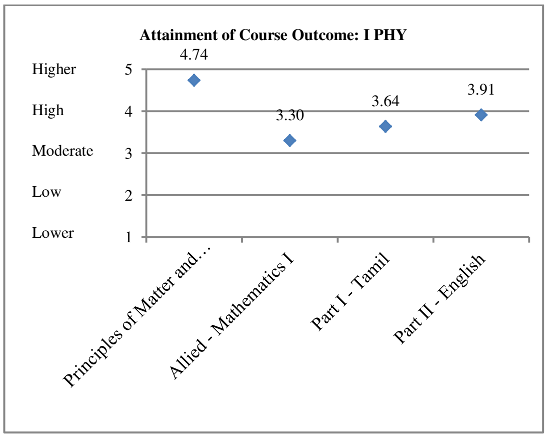
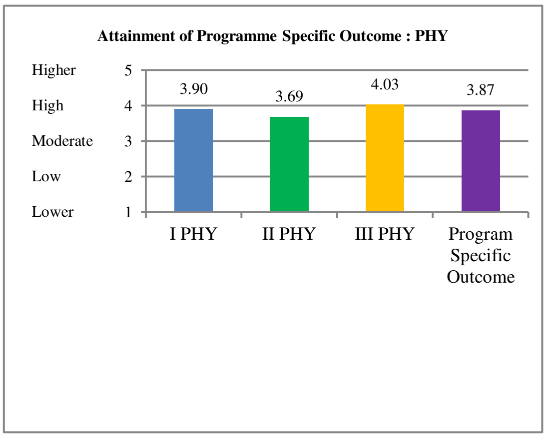
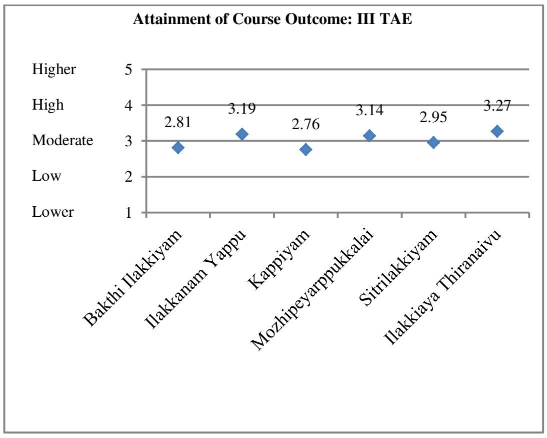


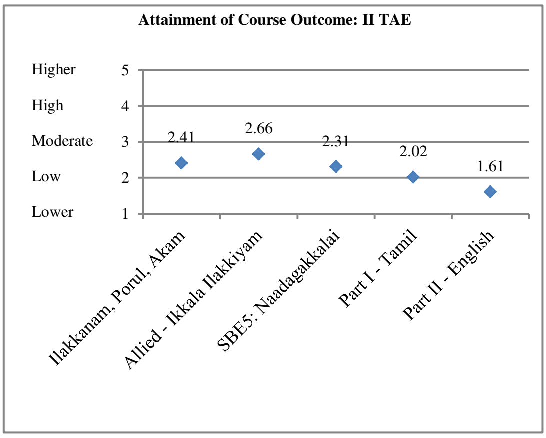


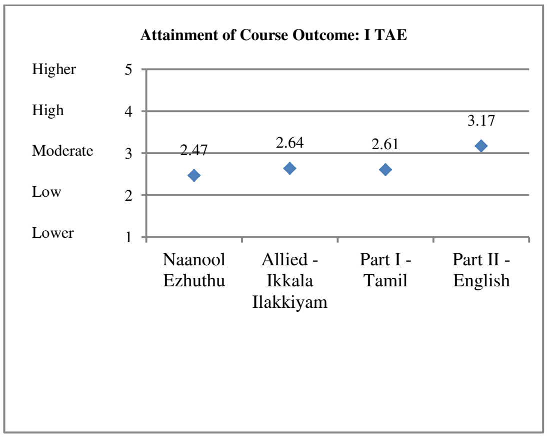


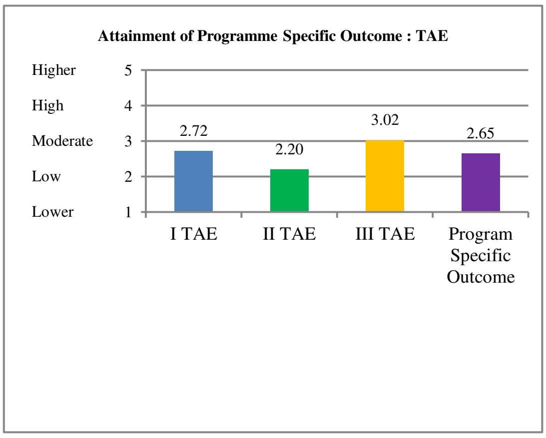


Department of Tamil (TAE)

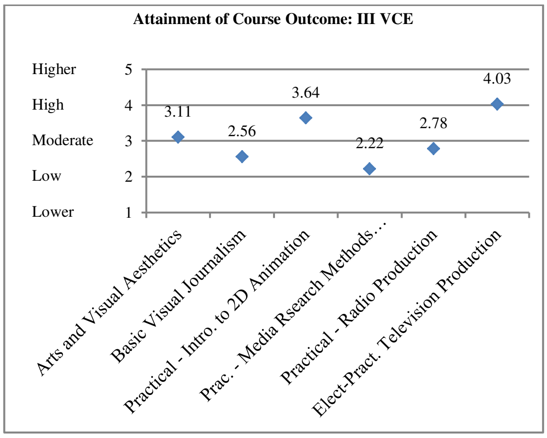


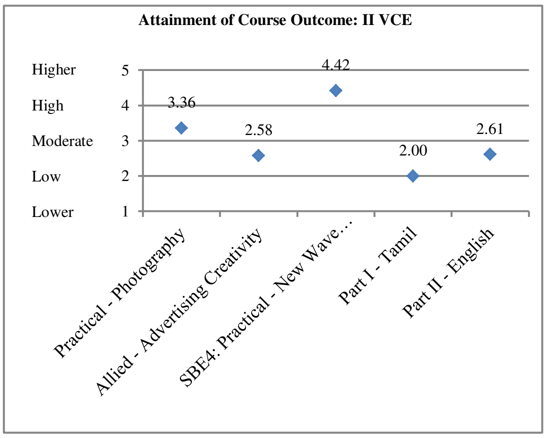


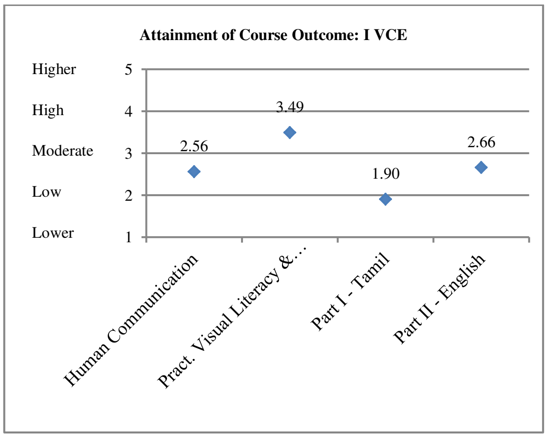


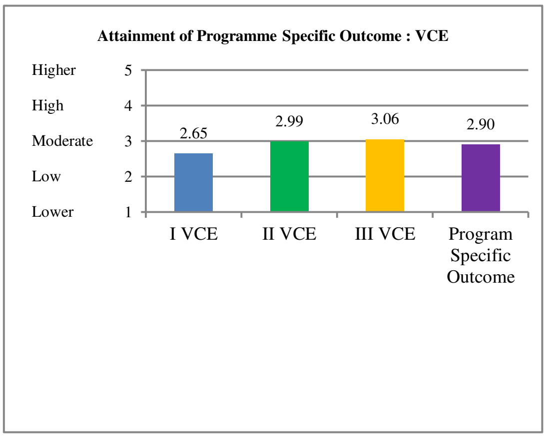


Department of Visual Communication (VCE)

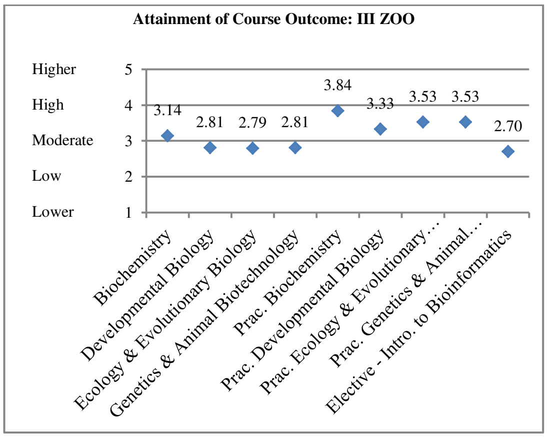


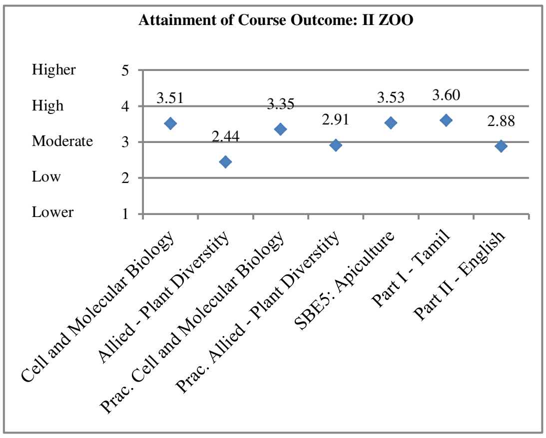


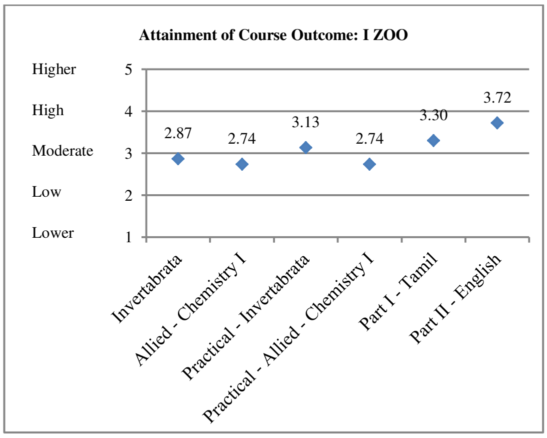


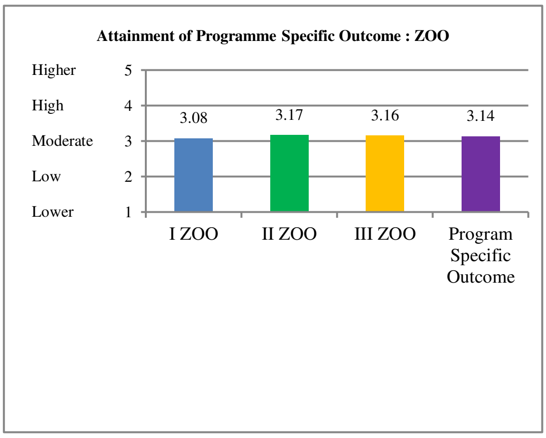


Department of Zoology (ZOO)

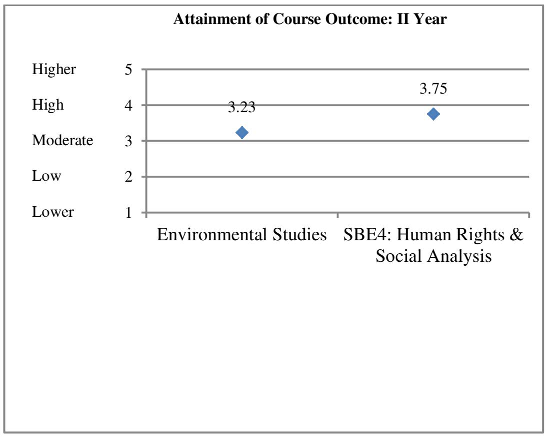




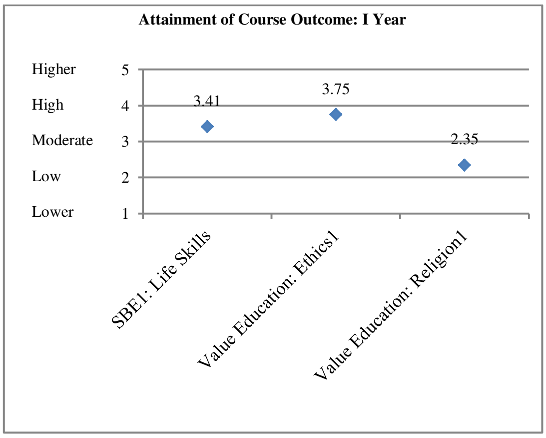


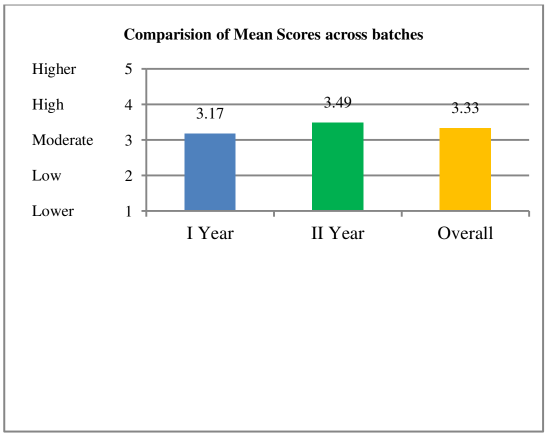


Other Courses

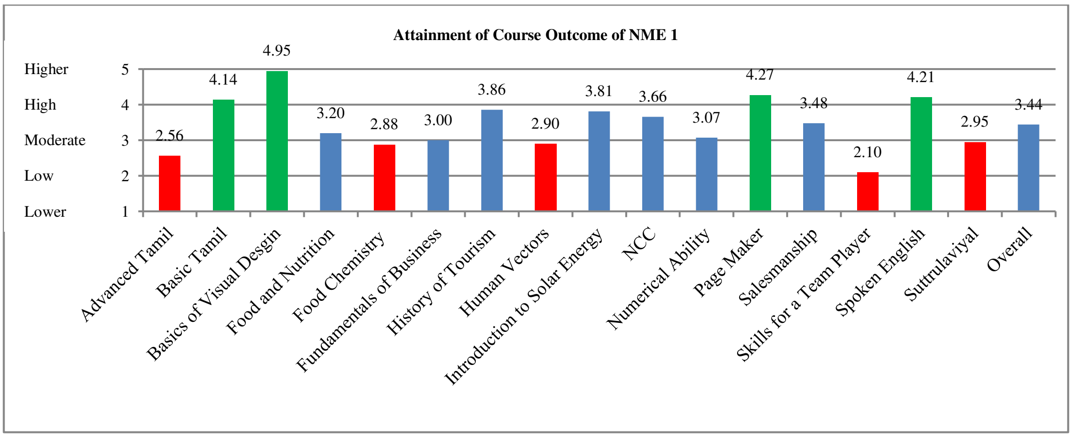


Other Courses





Non-major Electives



KEY FINDINGS

Attainment of Course Outcome

1. Attainment of Course Outcome was found to be in the range of high to higher in every fifth programme of the college (19%).
2. More than half of the courses (52%) has found moderate to high attainment of outcome.
3. Among the high and higher outcome attained courses, 82 percent of them was of Science courses.
4. The topmost outcome attained (mean score of 5) courses were two and they were of B.Sc. Mathematics Course.
5. The top ten courses are from B.Sc. Mathematics (5), B.Sc. Chemistry (4) and B.Sc. Physics (1) Programmes.
6. The worst outcome attained courses were from B.A Economics (8) and B.A. English (2) Programmes.

Attainment of Programme Specific Outcome

7. The five top programmes which attained relatively better programme specific outcome were B.Sc. Mathematics - Shift1 (4.13), B.Sc. Mathematics - Shift2 (4.06), B.Sc. Physics - Shift1 (3.87), B.Sc. Chemistry - Shift1 (3.84) and B.Com. - Shift1 (3.63).
8. B.Com was the only Arts Programme that attained a better Specific Programme Outcome with a mean score of 3.63, a level closer to high attainment.
9. B.A. Economics got an outcome attainment of 2.37 followed by B.A. Tamil (2.65).
10. Students of B.Sc. Chemistry Shift 1, B.Com of Shift 2, Computer Science of Shift 2 and B.Sc. Visual Communication of Shift 2 were found to be attaining their learning objectives better as they progressed year by year.
11. Students of B.A. Economics showed a declining trend in the attainment of learning objectives as they were progressing to higher levels.