



**Dr. M.G.R.**  
**EDUCATIONAL AND RESEARCH INSTITUTE**  
**(Deemed to be University)**  
Maduravoyal, Chennai - 600 095, Tamilnadu, India.  
(An ISO 9001 : 2015 Certified Institution)



# BCA 2017 & 2020

# CURRICULUM AND

# ELECTIVE LIST



*C. B. Palanivelu*  
REGISTRAR  
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Periyar E.V.R. High Road,  
Maduravoyal, Chennai 600 095



**BCA Computer Applications (Full Time)**  
**Curriculum & Syllabus**  
**2017 Regulations**

I SEMESTER						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
1.	HBTA17001/ HBHI17001/ HBFR17001	Tamil/ Hindi/French – I	3	0	0	3
2.	HBEN17001	English – I	3	0	0	3
3.	HBMA17A01	Allied Paper Mathematics I	3	1	0	4
4.	HBCA17G01	Fundamentals of Computers	3	1	0	4
5.	HBCA17G02	DOS and Office Automation	3	1	0	4
6.	HBCA17L01	DOS and Office Automation Laboratory	0	0	2	2
<b>Total</b>			<b>15</b>	<b>3</b>	<b>2</b>	<b>20</b>

II SEMESTER						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
1.	HBTA17002/ HBHI17002/ HBFR17002	Tamil/Hindi/French – II	3	0	0	3
2.	HBEN17002	English – II	3	0	0	3
3.	HBMA17A02	Allied Paper Mathematics II	3	1	0	4
4.	HBCA17G03	Financial Accounting	3	1	0	4
5.	HBCA17G04	Programming in C	3	1	0	4
6.	HBCA17L02	Programming in C Laboratory	0	0	2	2
<b>Total</b>			<b>15</b>	<b>3</b>	<b>2</b>	<b>20</b>



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III SEMESTER						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
1.	HBCA17A01	Allied Paper Introduction to Digital Fundamentals	3	1	0	4
2.	HBCA17G05	Data Structures	3	1	0	4
3.	HBCA17G06	Web Page Designing	3	1	0	4
4.	HBCA17G07	Operating Systems	3	1	0	4
5.	HBMG17L01	Soft SkillsI	2	0	0	2
6.	HBCA17L03	Data Structures using C Laboratory	0	0	2	2
7.	HBCA17L04	Web Page Designing Laboratory	0	0	2	2
<b>Total</b>			<b>14</b>	<b>4</b>	<b>4</b>	<b>22</b>

IV SEMESTER						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
1.	HBCA17A02	Allied Paper Computer Organization and Microprocessor Design	3	1	0	4
2.	HBCA17G08	Object Oriented Paradigm and Programming in C++	3	1	0	4
3.	HBCA17G09	Introduction to RDBMS	3	1	0	4
4.	HBCA17G10	Software Engineering	3	1	0	4
5.	HBMG17L02	Soft Skills II	2	0	0	2
6.	HBCA17L05	Programming in C++ Laboratory	0	0	2	2
7.	HBCA17L06*	RDBMS Laboratory	0	0	2	2
<b>Total</b>			<b>14</b>	<b>4</b>	<b>4</b>	<b>22</b>



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V SEMESTER						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
1.	HBMG17001	Environment Studies	3	0	0	3
2.	HBCA17G11	Programming in Java	3	1	0	4
3.	HBCA17EXX	Elective I	3	1	0	4
4.	HBCA17G12	Visual Programming	3	1	0	4
5.	HBCA17G13	Computer Graphics and Multimedia Systems	3	1	0	4
6.	HBCA17L07	Programming in Java Laboratory	0	0	2	2
7.	HBCA17L08	Visual Programming Laboratory	0	0	2	2
Total			15	4	4	23

VI SEMESTER						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
1.	HBMG17G01	Enterpreneurial Development	3	0	0	3
2.	HBCA17G14	Linux Operating System	3	1	0	4
3.	HBCA17EXX	Elective II	3	1	0	4
4.	HBCA17L09	Linux Laboratory	0	0	2	2
5.	HBCA17L10	PROJECT WORK	0	0	10	10
Total			9	2	12	23



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**Elective List-2017**

<b>Electives</b>						
<b>S.NO</b>	<b>Sub.Code</b>	<b>Title of the Subject</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1.	HBCA17E01	Computer Networks	3	1	0	4
2.	HBCA17E02	Information Security	3	1	0	4
3.	HBCA17E03	Professional Ethics	3	1	0	4
4.	HBCA17E04	Software Project Management	3	1	0	4
5.	HBCA17E05	Management Information System	3	1	0	4
6.	HBCA17E06*	Mobile Computing	3	1	0	4
7.	HBCA17E07	Image Processing	3	1	0	4
8.	HBCA17E08	Introduction to Cloud Computing	3	1	0	4
9.	HBCA17E09	Open Source Programming	3	1	0	4
10.	HBCA17E10	Software Testing	3	1	0	4



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**BCA Computer Applications (Full Time)**

**Curriculum & Syllabus**

**2020 Regulations**

<b>I SEMESTER</b>						
<b>S.NO</b>	<b>Sub.Code</b>	<b>Title of the Subject</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1.		Tamil/ Hindi/French – I	3	0	0	3
2.		English – I	3	0	0	3
3.		Allied Paper Mathematics I	3	1	0	4
4.		Fundamentals and Office Automation	3	0	0	3
5.		Programming in C	3	0	0	3
6.		DOS and Office Automation Laboratory	0	0	3	2
7.		Programming in C Laboratory	0	0	3	2
<b>Total</b>			<b>15</b>	<b>1</b>	<b>6</b>	<b>20</b>
<b>II SEMESTER</b>						
<b>S.NO</b>	<b>Sub.Code</b>	<b>Title of the Subject</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1.		Tamil/Hindi/French – II	3	0	0	3
2.		English – II	3	0	0	3
3.		Allied Paper Mathematics II	3	1	0	4
4.		Object Oriented Paradigm and Programming in C++	3	0	0	3
5.		Multimedia and Animation	3	0	0	3
6.		Programming in C++ Laboratory	0	0	3	2
7.		Multimedia and Animation Laboratory	0	0	3	2
<b>Total</b>			<b>15</b>	<b>1</b>	<b>6</b>	<b>20</b>
<b>III SEMESTER</b>						
<b>S.NO</b>	<b>Sub.Code</b>	<b>Title of the Subject</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1.		Allied Paper: Introduction to Digital Fundamentals	3	1	0	4
2.		Web Page Designing	3	0	0	3
3.		Financial Accounting	3	1	0	4
4.		Data Structures	3	0	0	3
5.		Soft SkillsI	2	0	0	2
6.		Web Page Designing Laboratory	0	0	3	2
7.		Data Structures using C++Laboratory	0	0	3	2
<b>Total</b>			<b>14</b>	<b>2</b>	<b>6</b>	<b>20</b>



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IV SEMESTER						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
1.		Allied Paper: Computer Organization and Microprocessor Design	3	1	0	4
2.		Visual Programming	3	0	0	3
3.		Introduction to RDBMS	3	0	0	3
4.		Operating Systems	3	1	0	4
5.		Soft Skills II	2	0	0	2
6.		Visual Programming Laboratory	0	0	3	2
7.		RDBMS Laboratory	0	0	3	2
<b>Total</b>			<b>14</b>	<b>2</b>	<b>6</b>	<b>20</b>

V SEMESTER						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
1.		Environment Studies	3	0	0	3
2.		Programming in Java	3	0	0	3
3.		Elective I (Choose any one of the subjects from 5 <sup>th</sup> Semester Elective)	3	0	0	3
4.		Programming in Python	3	0	0	3
5.		Computer Graphics	3	1	0	4
6.		Programming in Java Laboratory	0	0	3	2
7.		Programming in Python Laboratory	0	0	3	2
<b>Total</b>			<b>15</b>	<b>1</b>	<b>6</b>	<b>20</b>

VI SEMESTER						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
1.		Enterpreneurial Development	3	0	0	3
2.		Linux Operating System	3	0	0	3
3.		Internet of Things	3	1	0	4
4.		Software Engineering	3	1	0	4
5.		Elective II (Choose any one of the subjects from 6 <sup>th</sup> Semester Elective)	3	1	0	4
6..		Linux Laboratory	0	0	3	2
7.		PROJECT WORK	0	0	10	10
<b>Total</b>			<b>15</b>	<b>3</b>	<b>13</b>	<b>30</b>



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**ELECTIVE LIST**

**Elective for FIFTH Semester**

5 <sup>th</sup> SEMESTER Electives						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
1.		Computer Networks	3	0	0	3
2.		Information Security	3	0	0	3
3.		Professional Ethics	3	0	0	3
4.		Software Project Management	3	0	0	3
5.		Management Information System	3	0	0	3

**Elective for SIXTH Semester**

6 <sup>th</sup> SEMESTER Electives						
S.NO	Sub.Code	Title of the Subject	L	T	P	C
6.		Mobile Computing	3	1	0	4
7.		Image Processing	3	1	0	4
8.		Introduction to Cloud Computing	3	1	0	4
9.		Open Source Technologies	3	1	0	4
10.		Software Testing	3	1	0	4



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