

CURRICULUM and SYLLABUS								Page	1
Regulation		R 2016							
Programme Name		B.E. Civil Engineering (CE)							
SEMESTER I									
Course Code	Course Name	Category	Hours / Week			Credits	Maximum Marks		
			L	T	P	C	CA	ES	TOTAL
<b>THEORY</b>									
16HS101	Technical English I	HS	3	0	0	3	50	50	100
16BS101	Engineering Mathematics I	BS	3	1	0	4	50	50	100
16BS102	Engineering Physics	BS	3	0	0	3	50	50	100
16BS103	Applied Chemistry	BS	3	0	0	3	50	50	100
16ES102	Basic Electrical and Electronics Engineering	ES	3	0	0	3	50	50	100
16ES104	Principles of Computing Techniques	ES	3	0	0	3	50	50	100
<b>PRACTICAL</b>									
16ES112	Basic Electrical and Electronics Laboratory	ES	0	0	2	1	50	50	100
16ES113	Computer Programming Laboratory	ES	0	0	2	1	50	50	100
16BS112	Chemistry Laboratory	BS	0	0	2	1	50	50	100
<b>Total</b>						<b>22</b>			

SEMESTER II									
Course Code	Course Name	Category	Hours / Week			Credits	Maximum Marks		
			L	T	P	C	CA	ES	TOTAL
<b>THEORY</b>									
16HS201	Technical English II	HS	2	0	2	3	50	50	100
16BS201	Engineering Mathematics II	BS	3	1	0	4	50	50	100
16BS203	Materials Physics	BS	3	0	0	3	50	50	100
16HS202	Environmental Science and Engineering	HS	3	0	0	3	50	50	100
16ES202	Engineering Mechanics	ES	3	1	0	4	50	50	100
16ES205	Engineering Graphics	ES	1	4	0	3	50	50	100
<b>PRACTICAL</b>									
16ES212	Basic Civil and Mechanical Laboratory	ES	0	0	2	1	50	50	100
16BS211	Physics Laboratory	BS	0	0	2	1	50	50	100
16ES213	Computer Aided Drafting and Modeling Laboratory	ES	0	0	2	1	50	50	100
<b>Total</b>						<b>23</b>			

**M.KUMARASAMY COLLEGE OF ENGINEERING (AUTONOMOUS), KARUR – 639 113**

**CURRICULUM and SYLLABUS**

**Page 2**

**Regulation R 2016**

**Programme Name B.E. Civil Engineering (CE)**

**SEMESTER III**

Course Code	Course Name	Category	Hours / Week			Credits	Maximum Marks		
			L	T	P		C	CA	ES
<b>THEORY</b>									
16BS301	Engineering Mathematics III	BS	3	1	0	4	50	50	100
16CE301	Mechanics of Solids	PC	3	1	0	4	50	50	100
16CE302	Mechanics of Fluids	PC	3	0	0	3	50	50	100
16CE303	Surveying I	PC	3	0	0	3	50	50	100
16ES301	Construction Materials and Technology	ES	3	0	0	3	50	50	100
16CE304	Environmental Engineering I	PC	3	0	0	3	50	50	100
<b>PRACTICAL</b>									
16CE311	Surveying Laboratory I	PC	0	0	4	2	50	50	100
16CE312	Computer Aided Building Drawing	PC	0	0	4	2	50	50	100
16CD311	Career Skill Development I	EEC /HS	0	0	1	1	50	50	100
<b>Total</b>						<b>25</b>			

**SEMESTER IV**

Course Code	Course Name	Category	Hours / Week			Credit	Maximum Marks		
			L	T	P		C	CA	ES
<b>THEORY</b>									
16BS403	Numerical Methods	BS	3	1	0	4	50	50	100
16CE401	Strength of Materials	PC	3	0	0	3	50	50	100
16CE402	Hydraulics and Hydraulic Machinery	PC	3	1	0	4	50	50	100
16CE403	Surveying II	PC	3	0	0	3	50	50	100
16CE404	Concrete Technology	PC	3	0	0	3	50	50	100
16CE405	Environmental Engineering II	PC	3	0	0	3	50	50	100
<b>PRACTICAL</b>									
16CE411	Surveying Laboratory II	PC	0	0	4	2	50	50	100
16CE412	Strength of Material Laboratory	PC	0	0	4	2	50	50	100
16CD411	Career Skill Development II	EEC /HS	0	0	1	1	50	50	100
<b>Total</b>						<b>25</b>			

**M.KUMARASAMY COLLEGE OF ENGINEERING (AUTONOMOUS), KARUR – 639 113**

**CURRICULUM and SYLLABUS**

**Page 3**

**Regulation R 2016**

**Programme Name B.E. Civil Engineering (CE)**

**SEMESTER V**

Course Code	Course Name	Category	Hours / Week			Credits	Maximum Marks		
			L	T	P	C	CA	ES	TOTAL
<b>THEORY</b>									
16CE501	Design of Reinforced Concrete Elements	PC	3	0	0	3	50	50	100
16CE502	Structural Analysis I	PC	3	1	0	4	50	50	100
16CE503	Highway Engineering	PC	3	0	0	3	50	50	100
16CE504	Steel Structures	PC	3	0	0	3	50	50	100
16CE505	Irrigation and Water Resource Engineering	PC	3	0	0	3	50	50	100
16CE506	Soil Mechanics	PC	3	0	0	3	50	50	100

**PRACTICAL**

16CE511	Highway Engineering and Concrete Laboratory	PC	0	0	4	2	50	50	100
16CE512	Hydraulics and Hydraulic Machinery laboratory	PC	0	0	4	2	50	50	100
16CD511	Career Skill Development III	EEC /HS	0	0	1	1	50	50	100
<b>Total</b>						<b>24</b>			

**SEMESTER VI**

Course Code	Course Name	Category	Hours / Week			Credit	Maximum Marks		
			L	T	P	C	CA	ES	Total
<b>THEORY</b>									
16CE601	Advanced Concrete Design	PC	3	0	0	3	50	50	100
16CE602	Structural Analysis II	PC	3	1	0	4	50	50	100
16CE603	Foundation Engineering	PC	3	0	0	3	50	50	100
16CE604	Advanced Steel Design	PC	3	0	0	3	50	50	100
16CE605	Railway Engineering	PC	3	0	0	3	50	50	100
16CE- - -	Professional Elective I/Open Elective I	PE/ OE	3	0	0	3	50	50	100

**PRACTICAL**

16CE611	Soil Mechanics Laboratory	PC	0	0	4	2	50	50	100
16CE612	Environmental Engineering Lab	PC	0	0	4	2	50	50	100
16CE613	Survey Camp	PC	0	0	0	2	50	50	100
16CD611	Career Skill Development IV	EEC /HS	0	0	1	1	50	50	100
<b>Total</b>						<b>26</b>			

M.KUMARASAMY COLLEGE OF ENGINEERING (AUTONOMOUS), KARUR – 639 113									
CURRICULUM and SYLLABUS								Page	4
Regulation		R 2016							
Programme Name		B.E. Civil Engineering (CE)							
SEMESTER VII									
Course Code	Course Name	Category	Hours / Week			Credits	Maximum Marks		
			L	T	P	C	CA	ES	TOTAL
<b>THEORY</b>									
16CE701	Estimation and Quantity Surveying	PC	3	0	0	3	50	50	100
16CE702	Construction Management	PC	3	0	0	3	50	50	100
16BAX01	Professional Ethics and Human Values	HS	3	0	0	3	50	50	100
16CE - - -	Professional Elective II / Open Elective II	PE/OE	3	0	0	3	50	50	100
16CE - - -	Professional Elective III	PE	3	0	0	3	50	50	100
		PC	3	0	0	3	50	50	100
<b>PRACTICAL</b>									
16CE711	Irrigation and Environmental Engineering Drawing	PC	0	4	2	0	50	50	100
16CE712	Computer Aided Design and Drafting	PC	0	4	2	0	50	50	100
16CE713	Mini Project	EEC	0	6	3	0	50	50	100
<b>Total</b>						<b>22</b>			

SEMESTER VIII									
Course Code	Course Name	Category	Hours / Week			Credit	Maximum Marks		
			L	T	P	C	CA	ES	Total
<b>THEORY</b>									
16CE- - -	Professional Elective IV/Open Elective III	PE/OE	3	0	0	3	50	50	100
16CE- - -	Professional Elective V	PE	3	0	0	3	50	50	100
16CE- - -	Professional Elective VI	PE	3	0	0	3	50	50	100
<b>PRACTICAL</b>									
16CE811	Project Work	EEC	-	-	24	12	50	50	100
<b>Total</b>						<b>21</b>			

**M.KUMARASAMY COLLEGE OF ENGINEERING (AUTONOMOUS), KARUR – 639 113**

**CURRICULUM and SYLLABUS**

**Page 5**

**Regulation** R 2016

**Programme Name** B.E. Civil Engineering (CE)

**PROFESSIONAL ELECTIVE COURSES**

Course Code	Course Name	Category	Hours / Week			Credits	Maximum Marks		
			L	T	P	C	CA	ES	TOTAL
16CEE01	Introduction to Remote Sensing	PE	3	0	0	3	50	50	100
16CEE02	Maintenance and Rehabilitation of Structures	PE	3	0	0	3	50	50	100
16CEE03	Basics of Dynamics	PE	3	0	0	3	50	50	100
16CEE04	Earthquake Engineering	PE	3	0	0	3	50	50	100
16CEE05	Integrated Water Resource Management	PE	3	0	0	3	50	50	100
16CEE06	Municipal Solid Waste Management	PE	3	0	0	3	50	50	100
16CEE07	Geo-Environmental Engineering	PE	3	0	0	3	50	50	100
16CEE08	Environmental Impact Assessment	PE	3	0	0	3	50	50	100
16CEE09	Groundwater Engineering	PE	3	0	0	3	50	50	100
16CEE10	Water Resources Systems Engineering	PE	3	0	0	3	50	50	100
16CEE11	Ground Improvement Techniques	PE	3	0	0	3	50	50	100
16CEE12	Air Pollution Control	PE	3	0	0	3	50	50	100
16CEE13	Industrial waste water Engineering	PE	3	0	0	3	50	50	100
16CEE14	Prefabricated Structures	PE	3	0	0	3	50	50	100
16CEE15	Design of Prestressed Concrete Structures	PE	3	0	0	3	50	50	100
16CEE16	Urban Planning and Development	PE	3	0	0	3	50	50	100
16CEE17	Airport and harbour Engineering	PE	3	0	0	3	50	50	100
16CEE18	Geographic information System	PE	3	0	0	3	50	50	100
16CEE19	Design of Plate and Shell Structures	PE	3	0	0	3	50	50	100
16CEE20	Tall Structures	PE	3	0	0	3	50	50	100
16CEE21	Bridge Structures	PE	3	0	0	3	50	50	100
16CEE22	Hydrology and Water Resource Engineering	PE	3	0	0	3	50	50	100

**M.KUMARASAMY COLLEGE OF ENGINEERING (AUTONOMOUS), KARUR – 639 113**

**CURRICULUM and SYLLABUS**

**Page**

**6**

**Regulation** R 2016

**Programme Name** B.E. Civil Engineering (CE)

**ONE CREDIT COURSES**

Course Code	Course Name	Category	Hours / Week			Credit	Maximum Marks		
			L	T	P		C	CA	ES
16CEY01	Building Planning and Vaasthu	EEC	0	1	0	1	50	50	100
16CEY02	Tekla Structures	EEC	0	1	0	1	50	50	100
16CEY03	Advanced Surveying using Total Station	EEC	0	1	0	1	50	50	100
16CEY04	Building Valuation	EEC	0	1	0	1	50	50	100
16CEY05	Structural Analysis and Design using STAAD PRO	EEC	0	1	0	1	50	50	100
16CEY06	In plant Training / Internship	EEC	0	1	0	1	50	50	100
16CEY07	Finite Element and Structural Analysis using NISA	EEC	0	1	0	1	50	50	100
16CEY08	Building Analysis and Design using E- TABS	EEC	0	1	0	1	50	50	100
16CEY09	Building Information Modelling using Revit Architecture	EEC	0	1	0	1	50	50	100
16CEY10	Project Management using Primavera	EEC	0	1	0	1	50	50	100

**M.KUMARASAMY COLLEGE OF ENGINEERING (AUTONOMOUS), KARUR – 639 113****CURRICULUM and SYLLABUS****Page****7****Regulation****R 2016****Programme Name****B.E. Civil Engineering (CE)****OPEN ELECTIVES**

<b>Course Code</b>	<b>Course Name</b>	<b>Category</b>	<b>Hours / Week</b>			<b>Credits</b>	<b>Maximum Marks</b>		
			<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>CA</b>	<b>ES</b>	<b>TOTAL</b>
16CEZ01	Building Services	OE	3	0	0	3	50	50	100
16CEZ02	Disaster Management and Mitigation	OE	3	0	0	3	50	50	100
16CEZ03	Environmental Management	OE	3	0	0	3	50	50	100
16CEZ04	Experimental Stress Analysis	OE	3	0	0	3	50	50	100