

## Dr. M.G.R. Educational and Research Institute University (Declared as Decembed to be University u.s. of DOC Act 1956) Maduravoyal, Chennai — 95 (An 150 900) 1 2008 Certified Institution)

## INTER OFFICE COMMUNICATION

Ref: Dr. M.G.R/Univ/2015-16/973

Date: 02-05-2016

To

Ar. MEENAKSHI PARTHASARATHY

Convenor, PG Board of Studies

Faculty of Architecture

I am by direction of the ViceChancellor, inform you that the list of members of PG Board of Studies of the Faculty of Architecture, submitted by you, has been approved.

You are requested to conduct the PG Board of Studies meeting to revamp the syllabus and curriculum of the following courses before 3<sup>rd</sup> June 2016.

1. M.Arch (Interior Architecture)

FT/PT

2. M.Arch (Construction Project Management)

FT/PT

3. M.Arch (Landscape Architecture)

FT/PT

You are further requested to inform the date of Board of Studies meeting for the approval of ViceChancellor.

C B Palamell REGISTRAR

Copy to: -

- 1. President
- 2. ViceChancellor, Rector
- 3. Dean (E&T) and COE
- for kind information
- for kind information



C. B. Palamirel

REGISTRAR
Dr. M.G.R.

EDUCATIONAL AND RESEARCH INSTITUTE
(Decemed to be University)
Periyar E.V.R. High Road,
Maduravoyal, Chennai 600 095

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## FACULTY OF ARCHITECTURE

Date:3<sup>rd</sup> June,2016

## Minutes of BOARD OF STUDIES Meeting convened on 3<sup>rd</sup> June 2016.

Board of Studies comprising of the following members attended a meeting convened on3<sup>rd</sup> June 2016 at the Faculty of Architecture premises to discuss the revisions in syllabi of M. Arch courses viz.

- i) M.Arch Landscape Architecture
- ii) M.Arch- Construction Project Management
- iii) M.Arch-Interior Architecture

## **INTERNAL MEMBERS:**

S. No.	Name of the person	Designation
	CHAIR PERSON	V-
1	Ar. Meenakshi Parthasarathy	Director
	MEMBERS	
2	Ar. Swetha Madhusudanan	Dean
3.	Ar. Premalatha Praveen	HOD
4	Dr. Jayanthi	Professor
5	Dr. Kumudhavalli Sasidhar	Professor
6	Ar. Parisutha Rajan	Professor
7	Ar. Radhika. V	Professor
8	Ar. Fathima Taskeen. Z	Professor
9	Ar. Deepiga. K	Associate Professor
10	Ar. Vinolia. N	Associate Professor
11	Ar. Mookambika.B.A	Associate Professor
12	Ar. Selva Prakash	Assistant professor
13	Ar. Antara Sen Gupta	Assistant professor

## **EXTERNAL MEMBERS:**

- 1. Ar.Ranan Daniel Landscape Architecture Professional
- 2. Ar. Chandrasekaran C Interior Design Professional & Academician
- 3. Ar. Annalakshmi L Construction Project Management Professional & Academician

At the outset Ar. Meenakshi Parthasarathy – Director welcomed all the members and explained the necessity to review the current syllabi and invited suggestions from members.



## **FACULTY OF ARCHITECTURE**

## Ref:Dr.M.G.R/Univ/ARCH/BOS/2015-2016-028

Date: 03.06.2016

To

The Registrar,
Dr. M.G.R Educational and Research Institute University,
Maduravoyal, Chennai – 95.

## SUB: Minor revision in syllabus of B.arch 2014

In order to make the current syllabus more relevant to Architecture students, a few minor changes required as essential are listed below which may kindly be permitted to be incorporated.

## 1. Subject = Mathematics

Unit-I - Matrix-"Elementary transforms- inverse of a matrix by Gauss-Jordon method linear independence "deleted as of little relevance in Architecture Unit-II – to be replaced by – Analytical Geometry- Conics, Parabola, Ellipse, Hyperbola – derivation, properties, Tangents normals, Hands on excercises related to the above.

Unit-V- "Equations reducible to homogeneous form" deleted

## 2. Subject – Mechanics of structures –II ( III semester)

- a) Unit-V –introduction to indeterminate structures
   <u>Inlieu of</u> "Concept and analysis of continuous beams, fixed beams, cantilevers, and partial frames (No Problems),.

   <u>Recommended</u> "Determination of degree of statically indeterminacy for beams and frames- Concepts of Analysis (No Problems)"
- Additional reference recommended:
   R.K Bansal"A text book on strength of Materials" Laxmi publications, New Delhi 2006

## 3. Subject - Design Of Structures -I (IV Semester)

Additional Reference:-

- I. N.Subramaniam" Design of steel Structures" OUP India, 04 sep2008– Technology & Engineering
- II. S.S Bhavikatti "Design of steel structures" I.K International Publishing Housing pvt Ltd Delhi.

## 4. Subject - Design of structures-II ( V Semester )

Additional Reference: N.Krishna Raju "Design of Reinforced Concrette structures (15:456-2000)

## 5. Subject - Design of structures-III (VI Semester)

Additional reference:

N.Krishna Raju "Design of Reinforced Concrette structures (15:456-2000)

## 6. Subject - Surveying & Site Planning (IV Semester)

Unit-IV – "Preparation of Maps of Matrix analysis & Composite analysis" to be deleted.

Additional Reference - "Site analysis and planning by white

## 7. Subject histry of architecture & culture -II

Unit –IV:Delete "Traditional art & architecture of kerala – salient features of the Thravadu House- Nallukettu, Ettukettu etc.-Thatchu Sastra or the science of carpendry – roof wood frame details – padmanabhapuram palace, Museum building, Trivandrum – Contemporary Expressions – Center for development studies by Laurie baker – Projects by Costford – Ashtamudi resort hotel, IIM Kozhikode etc.

## 8. Vth Semester - Subject - Building Material -VI, Building Construction-VI VI Semester - Subject - Building Material -VI, Building Construction-VI

Interchange of above Vsemester subjects to VI semester Subjects to and VI semester subjects to Vsemester is recommended

**Justification** - A current syllabus in VI semester deals with vertical movement in buildings that include lifts, escalators etc. However as students are introduced to multi storey structures in Architectural Design in V semester, It is felt relevant to teach them basics of lifts, escalators etc in this semester itself. Therefore shifting of VI Semester subject to V semester recommended

## 9. IX Semester - Subject - Practical Training Credits to be changes to 14.

"Dissertation- 4 credits" to be deleted

**Justification** - It is increasingly becoming difficult to students as well as staff to have contact hours for discussion and guidance for Dissertation during the practical training period .Students doing practical training outside the city are also finding it difficult to get guidance.

In view of above it is recommended to allot full 14 credits to Practical Training and delete Dissertation from IX Semester. Instead, as Dissertation was originally intended to prepare the students for Research and Report Writing prior to "Thesis" It is now recommended to introduce it an additional Elective subject"Introducing to Practical Training and Thesis" which could be taken in the VII Semester when the students are in the college prior to their training period. Unit wise content proposed in the subject is enclosed.

10. Copy of subjectwise syllabus revised as above is enclosed along with curriculaum for approval please.

(Ar. Meenakshi Parthasarathy) DIRECTOR

The Board members discussed in detail various aspects of the current syllabi. They were of the unanimous view that the current syllabi in general are quite vast and touched upon most of the relevant aspects of the profession and are comparable to those of standard international universities.

However on the point of further improving the syllabi to suit the current requirements, following additions / alterations were recommended in the three M. Arch courses:-

1. As the faculty is keen on commencing Ph. D programmes – a common Elective "Research Methodologies in Architecture" is recommended for all three M. Arch streams.

## 2. <u>COURSEWISE REVISIONS:</u>

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## 2.1 M. Arch - LANDSCAPE ARCHITECTURE

Additional topics recommended to be included are listed below:

- (a) SUBJECT: HYDROLOGY AND WATER MANAGEMENT
  UNIT II Urban water cycle, sources of water.
- (b) SUBJECT: CLIMATE, BUILT FORM AND LANDSCAPES
  UNIT I Carbon neutral and negative concepts.
  UNIT IV Earth for Life approach.
- (c) SUBJECT: LANDSCAPE ECOLOGY AND PLANNING
  UNIT I Ecology & Ecosystem
- (d) SUBJECT: PLANTING AND HORTICULTURAL PRACTICES

  UNIT IV Leaf Area Index calculation for various native plant species of India.
- (e) SUBJECT: SUSTAINABILITY AND ENERGY CONSERVATION
  IN LANDSCAPE ARCHITECTURE
  UNIT III Leaf area Index and its importance. Xeriscape techniques.

## 2.2 M. Arch - INTERIOR ARCHITECTURE

Members had not felt the need for any revision is the current syllabus except for the inclusion of Electiv"Research Methedologies in Architecture".

## 2.3 M. Arch - CONSTRUCTION PROJECT MANAGEMENT

Additional topics recommended to be included are listed below:

(a) SUBJECT: Contract Management
UNIT - I - FIDIC CONTRACT.

(b) SUBJECT: Quality Management
UNIT – III – Concepts of Sigma.

(c) SUBJECT: Financial Management

UNIT – II – "Basis Of Accounting percentage Completion method – completed contract method – accounting for tax reporting & financial reporting purpose" – to be deleted as also included in Unit III.

- 3. All the above recommendations are incorporated in the M. Arch syllabi and copies are enclosed along with authentication by members.
- 4. The Meeting was concluded with thanks from the chair for the valuable contribution of the members in forming the M.Arch syllabi 2016.

Encl – List of Members Attended with signatures

M.Arch Lanscape Architecture syllabus – 2016

M.Arch Construction Project Management Syllabus – 2016

M.Arch Interior Architecture syllabus – 2016

(Ar. Meenakshi Parthasarathy)
DIRECTOR

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## **FACULTY OF ARCHITECTURE**

Ref:Dr.M.G.R/Univ/Arch/BOS/2015-2016-029

Date: 03.06.2016

Members of board of studies who had attended the meeting on3<sup>rd</sup> June 2016 and approved the syllabus 2016.

## **INTERNAL MEMBERS:**

S. No.	Name of the person	Designation	Signature
	CHAIR	PERSON	
1	Ar. Meenakshi Parthasarathy	Director	Pasauling
	MEM	IBERS	
2	Ar. Swetha Madhusudanan	Dean	Thin
3	Ar. Premalatha Praveen	HOD	Ju-
4	Dr. Jayanthi	Professor	immortan
5	Dr. Kumudhavalli Sasidhar	Professor	A ROMAN ADDITE
6	Ar. Parisutha Rajan	Professor	- Horain
. 7	Ar. Radhika. V	Professor	V. la
8	Ar. Fathima Taskeen. Z	Professor	E. A. O.L.
9	Ar. Deepiga. K	Asso Professor	Thender W
10	Ar. Vinolia. N	AssoProfessor	to Vindia
11	Ar. Mookambika.B.A	Asso Professor	( ) link
12	Ar. Selva Prakash	Asst professor	M. Symat
13	Ar. Antara Sen Gupta	Asst professor	Hallow

## **External Members:**

S. No.	Name of the person	Designation	Signature
1	Ar.Rajan Daniel	Landscape Architecture Professional	Dianjan
2	Ar.Chandrasekaran C	Interior Design Professional & Academician	forth
3	Ar.Annalakshmi L	Construction Project Management Professional & Academician	A Maria

(Ar. Meenakshi Parthasarathy)
DIRECTOR

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## **FACULTY OF ARCHITECTURE**

Ref:Dr.M.G.R/Univ/Arch/BOS/2015-2016-029

Date: 03.06.2016

Members of board of studies who had attended the meeting on3<sup>rd</sup> June 2016 and approved the syllabus 2016.

## **INTERNAL MEMBERS:**

S. No.	Name of the person	Designation	Signature
·	CHAIR	PERSON	Ψ
1	Ar. Meenakshi Parthasarathy	Director	Posaulty
	MEM	IBERS	
_2	Ar. Swetha Madhusudanan	Dean	a tanus
3	Ar. Premalatha Praveen	HOD	Su
4	Dr. Jayanthi	Professor	San on the
5	Dr. Kumudhavalli Sasidhar	Professor	Manus that the
6	Ar. Parisutha Rajan	Professor	Lette Ray
7	Ar. Radhika. V	Professor	Ven
8 .	Ar. Fathima Taskeen. Z	Professor	roka
9	Ar. Deepiga. K	Asso Professor	Deemah
10	Ar. Vinolia. N	AssoProfessor	NALL
11	Ar. Mookambika.B.A	Asso Professor	((O) Andifen
12	Ar. Selva Prakash	Asst professor	M. Ahrot.
13	Ar. Antara Sen Gupta	Asst professor	None

## **External Members:**

S. No.	Name of the person	Designation	Signature
. 1	Ar.Rajan Daniel	Landscape Architecture Professional	Der
2	Ar.Chandrasekaran C	InteriorDesignProfessional & Academician	July
3	Ar.Annalakshmi L	ConstructionProject Management Professional&Academician	Amalalalum

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(Ar. Meenakshi Parthasarathy)

DIRECTOR

o/c

## Dr.M.G.R EDUCATIONAL AND REASEARCH INSTITUTE

UNIVERSITY

FACULTY OF ARCHITECTURE

STAKE HOLDERS - BOARD OF STUDIES MEETING

S.NO	ACADEMIC YEAR	BOS CONVENED ON	M.ARCH-(CPM, INTERIOR -DESIGN&LANDSCAPE)  BOS MEMBERS  RE INTERNAL MEMBEDS	ANDSCAPE) .  RECOMMENDATIONS . Common Elective Research	APPROVAL
			TATAL COLUMNIA INTERNATION OF THE PROPERTY OF	Methodologies in Architecture	XXVI meet approved
			ALMEENAKSHI FAKTHASAKATHY	recommended for all three M.Arch	the amendments
			Ar.SWETHAMADHUSUDANAN	Streams.	submitted by BOS on 09/07/2016
			Ar.G.PREMALATHA PRAVEEN		(2016syllabus)
			Ar.JAYANTHI		
			Ar. KUMUDHAVALLI		
			Ar. PARISUTHARAJAN		
			Ar. RADHIKA		
			Ar. FATHIMA TASKEEN		
	2015-2016	03-06-2016	Ar.DEEPIGA.K		
		- 3- L	Ar. VINOLIA		
			Ar. MOOKAMBIKA		
		7	Ar.SELVA PRAKASH		
			Ar. SELVA PRAKASH		
			Ar. ANTARA SENGUPTA		,
			EXTERNAL MEMBER		
		<u> </u>	Ar. RAJAN DANIEL		- Verba
		<u> </u>	Ar. CHANDRASEKARAN		
		A	Ar. ANNALAKSHMI		

S.NO	ACADEMIC YEAR	BOS CONVENED ON	N BOS MEMBERS	RECOMMENDATIONS	APPROVAT
,			INTERNAL MEMBERS	1.To include "Applied optimization	ACADEMIC COUNCIL
			Ar.MEENAKSHI PARTHASARATHI	- 1 echinques for Architects" in the syllabus. 2. Suggested	XXI meet on approved the amendments
			Ar.SWETHAMADHUSUDANAN	apprenticeship training on ongoing construction site for CPM students	submitted by BOS on
<u> </u>	•		Ar.G.PREMALATHA PRAVEEN	3. Internal member ssuggested an	( syllabus 2014
·			Ar.SURESH BABU	intensive nature of 2weeks duration	,2014 K.)
			Ar.HARIESH .K.SANKARAN	at the begining of the M.Arch Course . 4.Recommendedin adding	
			Ar.ANILRAVINDRANATHAN	more electives and conducting more	
			Ar.VIDYALAKSHMI	subjects in Landscape Architecture	
2	2013-2014	24.05.2014	Ar.PRISCILLA SAMUEL	5 Suggested the revision of course content in some M.Arch subjects.	
			Dr.JOHNSON	6.The board of studies had	
			Ar.ARAVIND	semester improvement exam for	
			EXTERNAL MEMBERS	candidate who fail in their end semester Design/ Project.	
			Ar.PARISUTHARAJAN		
			Ar. VINODHINI		
			Ar. RAJESWARI		
			Ar.MANOHARAN		
			Ar.PREM CHIDAMBARAN		
			INTERNAL MEMBERS	4	ACADEMIC COUNCIL
			Ar.D.P.SEKAR	M.Arch courses.	AVII meet on approved the
			Ar. MEENAKSHI PARTHASARATHY	2. Disussed the total credits for the award of Masters degree.	ammendments submitted by BOS on
ťΩ	2012-2013	19 11 2012	Ar.SWETHAMADHUSUDANAN	<b>)</b>	06.05.13
			EXTERNAL MEMBERS		(Syllabus2012, 2012 R.)
		7	Ar.PARISUTHARAJAN		
		<u> </u>	Ar.SRINIVASAN		
		7	M.W.ANAND		

## Dr.M.G.R

## EDUCATIONAL AND REASEARCH INSTITUTE UNIVERSITY

## FACULTY OF ARCHITECTURE

# STAKE HOLDERS - BOARD OF STUDIES MEETING B.ARCH

9. <u>9.</u>				B.ARCH		
	S.NO	ACADEMIC YEAR	BOS CONVENED	BOS MEMBERS	RECOMMENDATIONS	APPROVAL
				INTERNAL MEMBER	1. Subjects like Mathematics, Mechanics of	ACADEMIC COUNCIL
	· .			Ar.MEENAKSHI PARTHASARATHY	Architectural Drawing - I, Survey and site	amendments submitted by
				Ar.SWETHAMADHUSUDANAN	Planing, History of Architecture and culture- II Suggested minor changes in syllahus	BOS on 19/07/2016
1				Ar.G.PREMALATHA PRAVEEN	2. Interchange of subjects V sem to VI sem	(=v1va) macus)
<u> </u>				Ar.JAYANTHI	Construction VI recommend	
				Ar. KUMUDHAVALLI	3. Introduction to Practical Training and Thesis	
				Ar. PARISUTHARAJAN		
	•.			Ar. RADHIKA		
				Ar. FATHIMA TASKEEN		
· · ·	<u> </u>	2015- 2016	03.06.2016	Ar.DEEPIGA.K		
				Ar. VINOLIA		
				Ar. MOOKAMBIKA		
<u> </u>				Ar.SELVA PRAKASH		
				Ar. SELVA PRAKASH		
				Ar. ANTARA SENGUPTA		
	<del>- · · · · · · · · · · · · · · · · · · ·</del>			EXTERNAL MEMBER		
:				Ar. RAJAN DANIEL		
<del>-</del>	·			Ar. KAVITHA		
<u></u>				Dr. KALAI SELVI		

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	<u>.</u>	-		ယ										2			•				s.No
	· · · · · · · · · · · · · · · · · · ·			2012-2013										2013-2014							ACADEMIC YEAR
Aı	Α	A		14.03.2012 A			Г-н-			T 85				23-05-2014							BOS CONVENED ON
Ar.W.ANAND	Ar.SOLOMON VEDHAMUTHU	Ar.RAVI	EXTERNAL MEMBERS	Ar.SWETHAMADHUSUDANAN	Ar. MEENAKSHI PARTHASARATHY	Ar.D.P.SEKAR	INTERNAL MEMBERS	Ar.SHARWILI	Ar.R.AADHI SESHAN	Ar.SOLOMON VEDHAMUTHU	EXTERNAL MEMBER	Ar.PRISCILLA SAMUEL	Ar.GREGORY BROWN	Ar.MANIVALLUVAN	Ar.BALASUBRAMANIAN	Ar.SURESH BABU	Ar.G.PREMALATHA PRAVEEN	Ar.SWETHAMADHUSUDANAN	Ar.MEENAKSHI PARTHASARATHY	INTERNAL MEMBER	BOS MEMBERS
					2013-2014  2. Disussed the total credits for the award of	e same for the new regulation of			by urban design and landscape in seventh semester.	5.Landscape and Ecology shall be replaced	one month after commencement of next semster	improvements exam shall be conduted for failed students of Architectural Design, about	next semester. However mid semester	4.Students who have failed in Architectural  Design shall be permitted to continue to the	3Life Skills to be introduced as part of value education subject.	course effectively.	bridge the learning part (I -7 sem) and the application part (10th Sem - thesis) of the	2.Practical Training would be better placed in the Eight and Ninth Semester as it would	2013 by council of Architecture.	1. Revision of syllabus and curriculum were	RECOMMENDATIONS
			7	and syllabus 2012, 2012	BOS on 15.10.2012 Finalized the curriculum	amendments submitted by	ACADEMIC COUNCIL										(syllabus))	BOS on 09/06/2014 ((2014 & 2014R	amendments submitted by	ACADEMIC COUNCIL	APPROVAL

				<u> </u>				* ************************************
				Δ.				S.NO
			7017-7017	2011-2012				ACADEMIC YEAR
			- [	05 00 2011				BOS CONVENED ON
Ar.W.ANAND	Ar.SURENDRAN	EXTERNAL MEMBERS	Ar. PRASANNA PANDIAN	Ar.G.J.JEYRAJ	Ar. MEENAKSHI PARTHASARATHY	Ar.D.P.SEKAR	INTERNAL MEMBERS	BOS MEMBERS
		Course in the Academic Year 2012 -2013.	4. Proposal for indroducing the M.Arch	Value Education (Sem-2)	curriculum  Communication Skills in English (sem-1)	of the following subjects in the	1Finalised the syllabus for the 1st and 2nd  B.Arch undergraduate course	RECOMMENDATIONS
· · ·					BOS on 25.01.2012 ( 2011 syllabus)	amendments submitted by	ACADEMIC COUNCIL	APPROVAL



## **FACULTY OF ARCHITECTURE**

Ref:Dr.M.G.R/Univ/Arch/BOS/2015-2016-029

Date: 04.06.2016

To

The Registrar,
Dr. M.G.R Educational and Research Institute University,
Maduravoyal, Chennai – 95.

## Respected Sir,

SUB: Minites of Board of studies – Meeting Reg – M.Arch syllabi 2016 Ref your letter No. Dr.M.G.R/Univ/2015 – 2016/973 02.05.2016

Board of studies meeting was convened on 03 june 2016 at the premises of faculty of Architecture to discuss the changes in the syllabi of all the three M.Arch streams viz

- i) M.Arch Landscape Architecture
- ii) M.Arch- Construction Project Management
- iii) M.Arch- Interior Architecture

Minutes of the above meeting together with the list & signatures of the Board members attended and ,one copy each of the finalised syllabus for the above three M.Arch course are enclosed for your further necessary action please

Encl – as above

(Ar. Meenakshi Parthasarathy)
DIRECTOR



## FACULTY OF ARCHITECTURE

# ABSTRACT OF B. ARCH AND M. ARCH REGULATIONS 24.06.2014 AND REVISION PROPOSED IN JUNE, 2016

## FACULTY: B. ARCH

ve passed all subjects vII semester and Training of IX	Ill subjects ster and of IX	Ill subjects ster and X Sho of IX semester Tra
Should have passed all subjects  Should have passed all subjects  The semester is a semester in the semester is a semester.	Should have passed all subjects  X  Up to VII semester and semester Practical Training of IX semester.	Should have passed all subjects  X  Up to VII semester and X  semester Practical Training of IX semester semester.
	Should have passed all subjects up to VII semester and Practical Training of IX semester.	Should have passed all subjects  up to VII semester and X  Practical Training of IX semester semester.
ild have passed all subjects to VII semester and tical Training of IX ster.	ill subjects ster and of IX	of IX semester
	X	X Should have passed Practical semester Training of IX semester.

# FACULTY: B. ARCH & M. ARCH

		<u> </u>
<b>12</b>	<b>n</b>	No.
Arch & M. Arch	Passing requirement for B.	SUBJECT NAME
52.9 & 53.7	52.8 & 53.6	PARA
52.9 & 53.7 If a candidate fails to secure a minimum of 50% marks in the VIVA — VOCE Examination he / she shall improve, resubmit the thesis on the same topic and appear for VIVA VOCE examination in the next semester. In such cases, the continuous assessment marks by the review committee already secured by the candidate shall remain valid.	52.8 & 53.6 If a candidate fails to secure minimum qualifying marks in the internal assessment, he/she shall not be allowed to submit the thesis and has to rejoin the final semester when in session next and submit the thesis as in the case of regular candidates.	CURRENT CLAUSE
52.9 & 53.7 If a candidate fails to secure a minimum of 50% marks in the VIVA – VOCE Examination he / she shall improve, resubmit the thesis on the same topic and appear for VIVA VOCE examination in the next semester. In such cases, based on their improvement, revision of internal assessment marks also may be done.	52.8 & 53.6 If a candidate fails to secure minimum qualifying marks in the internal assessment, he/she shall not be allowed to submit the thesis. However, he/she shall improve and resubmit thesis on the same topic for reevaluation of internal assessment in the next semester. On securing qualifying marks of 50% in revised internal assessment, he / she shall be permitted to submit the thesis and appear for VIVA VOCE.	PROPOSED
Highlighted topic has been revised in proposed clause.	Highlighted topic has been revised in proposed clause.	REMARKS



## FACULTY OF ARCHITECTURE

# ABSTRACT OF UNITS/TOPICS CHANGE PROPOSAL (WITHIN THE SUBJECT)

## FACULTY: B. ARCH

	<u> </u>	S.
	MATHEMATICS (I Semester) / BMAA01	SUBJECT NAME / CODE
II – LIND	r-LIND	UNIT NO.
THREE DIMENSIONAL ANALYTICAL  GEOMETRY  Direction cosines and ratio's – Angle between two lines – Equations of a plane – Angles between planes -Equations of a straight line – Coplanar lines – Shortest distance between skew lines – Sphere – Tangent plane – Plane section of a sphere.	Different types of matrices and its operations, Determinants, properties. Matrix: Elementary transforms-inverse of a matrix by gauss- Jordan method linear independence consistency of systems of equations-Definition of Rougher's theorem only characteristic equation- Eigen values and its vectors — clayey Hamilton's theorem only definition.	CURRENT SYLLABUS
ANALYTYCAL GEOMETRY Conics, Parabola, ellipse, hyperbola, rectangular hyperbola- derivation, properties, Tangents- normals. Hand on exercises related to the above.	Significance of Mathematics in Architecture Different types of matrices and its operations, Determinants, properties. Matrix: Consistency of systems of equations-Definitions of Roucher's theorem only characteristic equation-Eigen values and its vectors- Clayey Hamilton's theorem only definition	PROPOSED SYLLABUS
	Highlighted topic has been deleted in current syllabus and also include new topic in proposed syllabus.	REMARKS



				5
3	2	,		
MECHANICS OF STRUCTURES - II (III Semester) / BCEA02				
	UNIT - V		A - LIND	AI – LIND
REFERENCES:  1. M.M.Ratwani, &V.N.Vazirani, Analysis, Vol.I, Khannan Publishers-Delhi, 1987.  2. Timoshenko, S.P., and D.H.Young, Elements of Strength of Materials, Fifth edition, East West Press, 1993.  3. A.R.Jain and B.K.Jain, Theory and analysis of Structures, Vol.I, Nemachand and Bros, Roorkee,1987  4. B.C.Punmia, 'Strength of Materials and Theory of structures', Vol.I, Laxmi Publications, New Delhi 1994  5. R.K.Rajput "Strength of Materials", S.Chand & Company Ltd., New Delhi 1996.	INTRODUCTION TO INDETERMINATE STRUCTURES  Concept and analysis of continuous beams, fixed beams, cantilevers, and partial frames (No Problems).		ORDINARY DIFFERENTIAL EQUATIONS Linear equations of second order with constant coefficients - Simultaneous first order linear equations with constant coefficients - Homogeneous equation of Euler type - Equations reducible to homogeneous form.	FUNCTIONS OF SEVERAL VARIABLES Function of two variables – Partial derivatives – Total derivative – Jacobians – Taylor's series of two variable Maxima and Minima – Constrained maxima and minima – Lagrange's Multiplier method.
REFERENCES:  1. R.K.Bansal' A text book on "STRENGTH OF MATERIAL" Laxmi publications, New Delhi 2006.  2. M.M.Ratwani, &V.N.Vazirani, Analysis, Vol.l, Khannan Publishers-Delhi, 1987.  3. Timoshenko, S.P., and D.H.Young, Elements of Strength of Materials, Fifth edition, East West Press, 1993.  4. A.R.Jain and B.K.Jain, Theory and analysis of Structures, Vol.l, Nemachand and Bros, Roorkee, 1987  5. B.C.Punmia, 'Strength of Materials and Theory of structures', Vol.l, Laxmi Publications, New Delhi 1994	INTRODUCTION TO INDETERMINATE  STRUCTURES  Determination of degree of statistically indeterminacy for beams and frames – Concept of Analysis (No Problems).		ORDINARY  EQUATIONS  Linear equations of second order with constant coefficients - Simultaneous first order linear equations with constant coefficients - Homogeneous equation of Euler type.	FUNCTIONS OF SEVERAL VARIABLES Function of two variables – Partial derivatives – Total derivative – Jacobians - Constrained maxima and minima – Lagrange's Multiplier method.
Additional references has been added in this subject (Highlighted one).			Highlighted topic has been deleted in current syllabus	Highlighted topic has been deleted in current syllabus.



	5	4	Ų	<b>y</b>
	SURVEYING AND SITE PLANNING (IV Semester) /	DESIGN OF STRUCTURES – III (VI Semester) / BCEA05	DESIGN OF STRUCTURES - I(IV Semester) / BCEA03	
	UNIT – IV			
	DETAILED ANALYSIS AND TECHNIQUES  Context of the site. Introduction to existing master plans land use for cities, development	1. P.Dayaratnam, Design of Reinforced Concrete Structures, Oxford and IBH Publishing CO., 1983.  2. N.C.Sinha and S.K.Roy, Fundamentals of Reinforced Concrete, S.Chand and Co., New Delhi, 1983.  3. Ashok K.Jain Reinforced Concrete (Limit State Design) - Nemchand, Bros Roorkee 1983.  4. Krishna Raj, Prestressed Concrete Structures, Tata McGraw Hill, 1981	REFERENCES:  1. Ramachandra S., Design of Steel Structures, Standard Book House, Delhi, 1984.  2. A.S. Arya, Structural Design in Steel, Masonry and Timber, Nemchand and Bros, Roorkee, 1971.  3. National Building Code of India, 1983, Part VI, Structural Design.  4. Gurucharan Singh, Design of Steel structures, Standard Publishers, New Delhi, 1982.  5. Negi "Design of steel Structures" – Tata Mcgraw Hill Book Company, Delhi 1997.	
The state of the s	<u>DETAILED ANALYSIS AND TECHNIQUES</u> Context of the site. Introduction to existing master plans land use for cities, development	REFERENCES:  N. Krishna Raju 'Design of Reinforced Concrete Structures (15:456-2000):  P.Dayaratnam, Design of Reinforced Concrete Structures, Oxford and IBH Publishing CO., 1983.  N.C.Sinha and S.K.Roy, Fundamentals of Reinforced Concrete, S.Chand and Co., New Delhi, 1983.  A. Ashok K.Jain Reinforced Concrete (Limit State Design) - Nemchand, Bros Roorkee 1983.  Krishna Raj, Prestressed Concrete Structures, Tata McGraw Hill, 1981.	REFERENCES:  1. N. Subramaniam" Design of Steel Structures" OUP India, 04 Sep. 2008 – Technology & Engineering.  2. S.S. Bhavikatti "Design of Steel Structures" L.K. International Publishing Housing Pyt Ltd Delhi;  3. Ramachandra S., Design of Steel Structures, Standard Book House, Delhi, 1984.  4. A.S. Arya, Structural Design in Steel, Masonry and Timber, Nemchand and Bros, Roorkee, 1971.  5. National Building Code of India, 1983, Part VI, Structural Design.  6. Gurucharan Singh, Design of Steel structures, Standard Publishers, New Delhi, 1982.  7. Negi "Design of Steel Structures" – Tata Mcgraw Hill Book Company, Delhi 1997.	6. R.K.Rajput "Strength of Materials", S.Chand & Company Ltd., New Delhi 1996.
	Highlighted topic in current syllabus has been deleted	Additional references has been added in this subject (Highlighted one).	Additional references has been added in this subject (Highlighted one).	



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		6			
		HISTORY OF ARCHITECTURE & CULTURE - II (II Semester) / BAR006			BAR022
		UNIT –			
	Traditional Art & Architecture of Kerala – Salient features of the Thravadu House – Nallukettu, Etrukettu etc. – Thatchu Sastra or the science of carpentry – roof wood	Rock cut productions under Pallavas: shore temple, Mahabalipuram, and Kailasanatha temple Kanchipuram - Chola Architecture: Nartamalai, Brihadeeswara, Gangaikonda Choilapuram and Darasuram temple - temple gateways of Madurai and Chidambaram - Temple towns: Madurai, Srirangam and Kanchipuram. Hoysala architecture: Belur and Halebid.	IEMPLE ARCHITECTURE - SOUTHERN  INDIA  Brief history of South India - relation between Bhakti period and temple architecture - of temple towns - Dravidian Order - evolution and form of gopuram.	REFERENCES:  1. Kevin Lyunch – Site planning – MIT Press, Cambridge, MA – 1967.  2. B.C. Punmia – Surveying Vol.l – Standard Book House, New Delhi – 1983.  3. P.B. Shahani – Text of surveying Vol. I,Oxford and IBH Publishing Co – 1980.  4. Joseph de.Chiarra and lee Coppleman – Planning Design Criteria – Van Nostrand Reinhold Co., New York – 1968.	control Rules. Preparation of maps of matrix analysis & composite analysis. Study of contours, slope analysis, grading process, grading criteria, functional and aesthetic considerations.
The state of the s		temple, Mahabalipuram, and Kailasanatha temple Kanchipuram – Chola Architecture: Nartamalai, Brihadeeswara, Gangaikonda Choilapuram and Darasuram temple – temple gateways of Madurai and Chidambaram - Temple towns: Madurai, Srirangam and Kanchipuram. Hoysala architecture: Belur and Halebid.	TEMPLE ARCHITECTURE - SOUTHERN INDIA Brief history of South India - relation between Bhakti period and temple architecture - of temple towns - Dravidian Order - evolution and form of gopuram.	REFERENCES:  1. "Site Analysis and Planning" by White 2. Kevin Lyunch – Site planning – MIT Press, Cambridge, MA – 1967. 3. B.C. Punmia – Surveying Vol.I – Standard Book House, New Delhi – 1983. 4. P.B. Shahani – Text of surveying Vol. I,Oxford and IBH Publishing Co – 1980. 5. Joseph de.Chiarra and lee Coppleman – Planning Design Criteria – Van Nostrand Reinhold Co., New York – 1968.	control Rules. Study of contours, slope analysis, grading process, grading criteria, functional and aesthetic considerations.
		Highlighted topic in current syllabus has been deleted		Additional reference has been added in this subject (Highlighted one).	, ō



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	VI (VI Semester) / BAR032	BUILDING MATERIAL - VI (VI Semester) /BAR 032, BUILDING CONSTRUCTION -			
		ALL			
plastics, vermiculite and glass fibres. Gypsum - manufacture, properties and uses, plaster of Paris and anhydride gypsum. Construction details of the materials application of floor, walls and roofs. Detailing for physically handicapped.  UNIT III ACOUSTIC INSULATION	Heat transfer and heat gain by materials - vapour barriers and rigid insulation. Blanket, poured and reflective insulation - properties and uses of spun glass, foamed glass, cork, vegetable fibres, mineral fibres, foamed	uses, (Waterproofing membranes such as rag, asbestos, glass, felt plastic and synthetic rubber - Vinyls, butyl rubber, neoprene polyvinyl chloride (PVC) - prefabricate membranes - sheet lead, asphalt - properties and uses.  Application of the above under various situations - basement floors, swimming pool, terraces etc.	UNIT I DAMP AND WATER PROOFING Damp proofing -hot applied and cold applied - Emulsified asphalt, Bentonite clays, butyl rubber, silicones, vinyls, Epoxy resins and metallic water proofing materials - properties,	development studies by Laurie Baker - Projects by Costford - Ashtamudi resort hotel, HM Kozhikode etc.  VIH - BUILDING MATERIAL - VI / BUILDING CONSTRUCTION - VI of all units	frame details - Padmanabhapuram Palace, Museum building, Trivandrum - Contemporary expressions - Center for
DEVELOPED BY  RESEARCH ORGANISATION  Study of construction system innovated through research organisations like CBRI, NBO, SERC, etc. Floor wall and roofing systems.  Ferrocement its properties, uses and	CONVEYORS  Parallel and criss - cross escalators, horizontal belt conveyors, horizontal moving walkways - for physically handicapped mechanical safety systems and automatic control.		BAR031 BUILDING MATERIALS - VI UNIT I VERTICAL MOVEMENT EQUIPMENTS IN BUILDINGS Elevators - Historical development of elevators or life Flevators - size capacity speed	VITH - BUILDING MATERIAL - VI / BUILDING CONSTRUCTION - VI of all units	
	subjects.	Interchanged of V semester subject to			

Porous, Baffle and perforated materials such as acoustic plastic, acoustic files, wood, partial board, fibre board, cork, quilt and mats - Brief study on properties and uses of above - current developments.

# UNIT IV FLOOR AND WALL COVERING

Floor coverings -flooring - softwood, hardwood - Resilient flooring - Linoleum, Asphalt tile, vinyl, rubber, cork files - terrazzo - properties, uses and laying. Wall coverings - Porcelain, enameled metal, wood veneer, Vinyl, plastic surfaced panelling - properties, uses and laying. Wall and floor tiles - Ceramic glazed, mosaic, quarry and cement tiles - properties, uses and laying. Detailing for physically handicapped.

## UNIT VPROTECTIVE AND DECORATIVE

## COATING

Paints - Enamels, distempers, plastic emulsions, and cement based paints - properties, uses and applications - Painting on different surfaces - defects in painting. Clear coatings and strains - Varnishes, Lacquer, Shellac, Wax Polish and Strains - Properties, uses and applications. Special purpose paints - Bituminous, Luminous, fire retardant and resisting paints - properties, uses and applications.

## BAR02 BUILDING CONSTRUCTION - V

## UNIT I DAMP AND WATER PROOFING

Plates on water proofing of basement floors, swimming pools, terraces etc. and materials specification on drawings.

rials such as application in building construction including ood, partial the techniques of preparation, casting, curing, mats - Brief etc.

## UNIT IV FOUNDATIONS

Pile foundation, different types of piles, precast and cast in situ with reinforcement details for different types of grids, details of pile capping, jointing of precast piles and columns.

## UNIT V MISCELLANEOUS

## STRUCTURES

Shell structures, domes, space frame, shell barred vault, folded plate structures, tensile structures, pneumatic structures, etc

# BAR032 BUILDING CONTRUCTION - VI

## UNIT I VERTICAL MOVEMENT

## **EQUIPMENTS IN BUILDINGS**

Plates on positioning of core under planning grid. Types of elevators - Electric, hydraulic - passenger, hospital, capsule, freight, etc. Dumb waiters, details of lift shaft and other mechanism. Detailing and fitting for physically handicapped.

## UNIT II ESCALATORS AND CONVEYORS

Plates on parallel and criss - cross escalators, horizontal belt conveyors, horizontal moving walkways - for physically handicapped mechanical safety systems and automatic control.

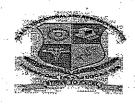
## UNIT III FOUNDATIONS

Plates on pile foundation, different types of



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NEW ELECTIVE SUBJECT (VII Semester) / BARE15	PRACTICAL TRAINING - II & DISSERTATION (IX Semester) / BARL09	
	Code NoCOURSE TITLELTSCBARL 09Practical Training - II00**10BARL 10Dissertation Total Credit00**4	UNIT II  THERMAL INSULATION  Plates on details of heat and cold insulation of floor, walls and roofs, using different insulation materials in cold storages.  UNIT II  ACOUSTIC INSULATION  Plates on acoustic insulation of floor, walls and roofs, using different insulation materials in seminar hall and theatres.  UNIT IV  FLOOR AND WALL COVERING  Plates on different application of materials used in different function of areas for floor & Wall coverings.
"Introducing to Practical Training and Thesis"	Cod e NoCOURSE TITLELTSCBAR 	piles, precast and cast in situ with reinforcement details for different types of grids, details of pile capping, jointing of precast piles and columns.  UNIT IV MISCELLANEOUS  STRUCTURES  Plates on shell structures, domes, space frame, shell barred vault, folded plate structures, tensile structures, pneumatic structures, etc
Unit wise content proposed in the subject is enclosed	It is recommended to allot full 14 credits to practical training and delete Dissertation from IX semester.	

Dean
Faculty of Architecture
Dr. M.G.R.
EDUCATIONAL & RESEARCH INSTITUTE
UNIVERSITY
Chennal-600 095



## FACULTY OF ARCHITECTURE

Ref:Dr.M.G.R/Univ/Arch/2016-2017-040

Date: 11.08.2016

To

The Joint Registrar,

Dr. M.G.R Educational and Research Institute University,

Maduravoyal, Chennai - 95.

## Sub: Staff list & amendiments in syllabus - reg.,

Sir,

- 1. Please find enclosed list of staff currently held at Faculty of Architetcure along with their date of joining.
- 2. Two points which were missed out in the amendments to B.A rch syllabus listed below may kindly be approved.
  - i. w.r.t to letter from secretary UGC dt 1<sup>st</sup> june 2016 regarding inclusion of subject / course in Urban Planning it is clarified that Urban Planning is presently taught in B. Arch VII semester under "Human Settlements & Town Planning" subject. However to give more stress to smart city planning, the following addition has been proposed in Unit II:-

"Challenge of Urbanisation - Planning and Development of Smart cities"

ii. B. Arch & M. Arch regulations – Clause 51.2. As per present clause 51.2 of the B. Arch regulations, the requirement to become eligible to register for the university examinations in IX semester, a student should have passed in Practical training of VIII semester and Architectural Design of VII semester.

The proposed change in the 51.2 clause is that requirement for appearing B. Arch IX semester examination, a Student should have passed Architectural Design – VII semester.

Encl: As above.

(Prof. Mecnakshi Parthasarathy)

DIRECTOR

## SEMESTER VII 3 AVA

**BAR034** 

## **HUMAN SETTLEMENTS & TOWN PLANNING**

LTSC 3003

## UNIT I INTRODUCTION

10

Elements of Human Settlements - Role of Man and Society in the growth and decay of human settlements.

## UNIT II PLANNING CONCEPTS

10.

Contribution to planning thought - Patric Geddes, Ebener Howard - CA Perry - Le Corbusier Doxiadis - Mumford - Relevance to Indian Planning Practice - Challenge of Proposition (1988)

## UNIT III URBAN PLANNING

10

Various types of plans, Master plan, structure plan, comprehensive plan, subject plan, Zonal Development plan, their scope and content, planning process.

## UNIT IV URBAN DEVELOPMENT PROGRAMMES

8

IUDP, IDSMT, Megacity, FIRE, Sustainable City Programme - their context, concept, scope, content and funding mechanism

## UNIT V RURAL PLANNING

7

Rural settlement structure - Demographic dynamics - micro level planning: Scope and content.

## TOTAL: 45 PERIODS

## REFERENCES:

- 1. C.L.Doxiadis, Ekistics, 'An Introduction to the Science of Human Settlements, Hutchinson, London, 1968.
- 2. Madras Metropolitan Development Authority, 'Master Plan for Madras Metropolitan Area, Second Master Plan 1995.
- 3. Government of India, 'Report of the National Commission on Urbanisation', 1988.
- 4. Ministry of Urban Affairs and Employment, Government of India, New Delhi, 'Urban Development Plans: Formulation & Implementation' Guidelines 1996.
- 5. Hansen N., 'Regional Policy and Regional Integration' Edward Elgar, UK, 1996.
- 6. Centre for Human Settlements, Anna University, Chennai 'Development Plan for Uthokottai Taluk, Cheyyur Taluk', 1999.
- 7. Andro D.Thomas, 'Housing and Urban Renewal, George Allen and Unwin, Sydney, 1986.



## B APPROVAL INFORMATION

## **B1. PROGRAMME DELIVERY CHANGE**

List the departments	that are involved in the dolivers of this	3,
contributions.	that are involved in the delivery of this subject and explain their	individual
		•

		No. of seats
Faculty	of Architect	ure So
B2. Proposed Units / Chapters	changes.	
List all Units / Chapters to be	•	List all NEW or Changed Units / Chapters
part of unit. IV of	ealing with tra	Le Honal
Art and Architecture	of Keralas	
33. Does the proposed change	affect the core progr	am or structure of the Programme?
No		Yes
4. Does the proposed change	affect the progressio	n pathways of the Programme?
No		Yes - Explain
5. Does the proposed change	affect the learning ou	tcomes of the Programme?
No		Yes – Provide the proposed set of learning outcomes
	be	Her understanding of the
	1	hole subject.
6. Does the proposed change	affect the graduate at	tributes for the Programme?
No		Yes – Provide the proposed graduate attributes
. Does the proposed change	affect the generic skill	Is for the Programme?
		<u> </u>
No		Yes - Provide the proposed generic skills

UNITS / TOPICS CHANGE PROPOSAL (WITHIN THE SUBJECT)
Under graduate Post Graduate Research Others
Faculty: B. Auch Department: Auchi Lecture Specialisation:
A PROGRAMME INFORMATION
A1. Programme Name and Abbreviation
Bachelor of Architecture B. ARCH.
A2. Programme Coordinator
Name / ANITHA . R. B / ASSISTANT PROFESCOR.
A3. Subject Description and Code
MECHANICS OF STRUCTURES - II (III SEMESTER)
A4 PROPOSED CHANGE
UNIT - V INTRODUCTION TO INDETERMINATE STRUCTURES
DETERMINATION OF DEGREE OF STATICALLY INDETERMINANCY FOR
BEAMS AND FRAMES - CONCEPT OF ANALYSIS (NO PROBLEMS)
A5 REASON FOR PROPOSED CHANGE
(References from student feed back , Alumni, Communities, Competitors, Govt. polices, Standards and Industries )
FOR SECOND YEAR LEVEL, METHODS OF ANALYSIS OF ALL TYPES OF
BEAMS IS COMPLICATED, WHICH IS OF POI LEVEL . STANDARDS
EACH CONCEPT REQUIRES INDEPTH UNDERSTANDING AND ANALYSIS
WHICH CANNOT BE BROUGHT AS OVERALL BASICS.

## A6. CHANGE TO TAKE EFFECT FROM

Academic Year		
	<u></u>	

PROPOSED BY Er. Anitha KB Aset. Professor

Name	Designation	Signature	Date
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ANTHA KB	ASSISTANT PROTESSOR	& H	IN.



## **B APPROVAL INFORMATION**

## **B1. PROGRAMME DELIVERY CHANGE**

List the departments that are involved in the delivery of this subject and explain their individual contributions.

Departme	nts				No. of seats
	Fault	5]	Archite	ehre	So
B2. Propo	sed Units / Chap	ters cha	nges		
List all l Changed	Jnits / Chapters	to be di	scontinued	or	List all NEW or Changed Units / Chapters
UNIT - I	<b>/</b> .				UNIT-V.
					ADDITIONAL REFERENCES.
B3. Does	the proposed ch	ange aff	ect the core	program	or structure of the Programme?
	No				Yes
B4. Does	the proposed ch	ange aff	ect the progr	ession p	athways of the Programme?
/	No	•			Yes – Explain
	•				
B5. Does	the proposed ch	ange aff	ect the learni	ng outco	mes of the Programme?
	No			·	Yes – Provide the proposed set of learning outcomes
				belt.	er references '
36. Does 1	he proposed cha	inge affe	ect the gradu	ate attrib	utes for the Programme?
/	No				Yes – Provide the proposed graduate attributes
					· ·
37. Does t	he proposed cha	nge affe	ct the generi	c skills f	or the Programme?
X	No	-			Yes – Provide the proposed generic skills
			I	i	habasa Banana akina

B8. Are there implications for stu	dents current	ly enrolled	in the Programme?	
No			Yes – Explain how currently enrolled students will be managed (under the old rules or the new rules),	
		The cl	range will be effect batch on wards	Rive for 201
B9 Descriptor of the Progr	amme			
B9a Details Summary details of the award include normal duration of study, language e	ing admission tc.,	requireme	nts at the time of entry to th	e Programme,
Current	NA		Proposed	
B9b Features Include matters such as professional learning	placements, i	ndustry-bas	ed learning or overseas stu	dy, work integrate
Current	MA		Proposed	
May include summary details on furth serves as preparation  Current	er or advance	d higher ed	ucation awards for which the	is award typically
A. 8		· · · · · · · · · · · · · · · · · · ·		
B9d Programme Accreditation Include a statement regarding relevan	nt external (pro	ofessional) :	accreditation of the Program	nme (Optional)
Current			Proposed	
·				· · · · · · · · · · · · · · · · · · ·
Conclusion : This Change is I	Recommende	d to Acad	emic Council / Rejected	/ Kept Pendinç
Name	Designa	tion	Signature	Date
Ar Macmalini Parthanavatu	Dirce	f	Reamby	7/6/2016
to Swedta Madhusudaya	Dea		1 thurstolle	1)
Ar · Premelatha fraveon	40-	— <del>—</del>	1 Novi	07/06/16

Registrar Office
Periyar E.V.R.
High Road
Maduraya

REGISTRAR
Dr. M.G.R.
EDUCATIONAL AND RESEARCH INSTITUTE.
(Deemed to be University)
Design F V.R. High Road,

C. B. Palamirely