

# SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY, TUMAKURU

(A Constituent College of Sri Siddhartha Academy of Higher Education, Tumakuru)

## SCHEME OF TEACHING AND EXAMINATION 2021

Choice Based Credit System (CBCS) (Effective from the academic year 2020-21)

### I SEMESTER

I Semester B.E.(Common to All Branch) (CHEMISTRY CYCLE)

Sl No.	Course Code		Course Title	Teaching Department	Board of Exam	Teaching Hours/week				Examination			
						L	T	P	Cr	CIE	SEE	Total Marks	Exam Hours
01	BS	BS-MA101	Calculus and Linear Algebra	MATHS	MA	3	1	-	4	50	50	100	3
02	ES	ES-EC102	Basic Electronics Engineering	ELECTRONICS	EC	3	-	-	3	50	50	100	3
03	ES	ES-ME103	Mechanical Engineering Science	MECHANICAL	ME	3	-	2	4	50	50	100	3
04	BS	BS-CH104	Engineering Chemistry	CHEMISTRY	CH	3			3	50	50	100	3
05	ES	ES-CS105	Programming for Problem Solving	COMPUTER SC	CS	3	1	-	4	50	50	100	3
06	BS	BS-CHL106	Engineering Chemistry Lab	CHEMISTRY	CH	-	-	2	1	50	50	100	3
07	ES	ES-CSL107	Programming Lab	COMPUTER SC	CS	-	-	2	1	50	50	100	3
08	HS	HS-CP108	Constitution of India and Professional Ethics	HUMANITY SC	HS	2	-	-	0	50		50	
09	HS	HS-KA109	Kannada	HUMANITY SC	HS	2	-	-	0	50		50	
<b>Total</b>						19	02	06	20	450	350	800	

L-Lecture,

T-Tutorial,

P-Practical,

CIE-Continuous Internal Evaluation,

SEE-Semester End Examination

**HS-KA109 Kannada course will be conducted only for those students who have not pass Kannada qualifying examination**

There is no Semester End Examination for Constitution of India and Professional Ethics HS-CP108 but attendance should be minimum of 85% in theory and shall have obtained minimum of 40% in CIE (out of 50)

Sri Siddhartha Institute of Technology  
Maralur, Tumakuru - 572 105.

**SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY, TUMAKURU**  
**(A Constituent College of Sri Siddhartha Academy of Higher Education, Tumakuru)**  
**SCHEME OF TEACHING AND EXAMINATION 2021**  
**Choice Based Credit System (CBCS) (Effective from the academic year 2020-21)**  
**I SEMESTER**

I Semester B.E.(Common to All Branch) (PHYSICS CYCLE)					Teaching Hours/week				Examination				
Sl No	Course Code		Course Title	Teaching Department	Board of Exam	L	T	P	Cr	CIE	SEE	Total Marks	Exam Hours
01	BS	BS-MA101	Calculus and Linear Algebra	MATHAS	MA	3	1		4	50	50	100	3
02	BS	ES-EEI102	Basic Electrical Engineering	ELECTRICAL	EE	3			3	50	50	100	3
03	ES	ES-CE103	Elements of Civil Engineering	CIVIL	CV	3		2	4	50	50	100	3
04	ES	BS-PH104	Engineering Physics	PHYSICS	PH	3			3	50	50	100	3
05	ES	ES-ME105	Computer Aided Engineering Design	MECHANICAL	ME	2		4	4	50	50	100	3
06	BS	BS-PHL106	Engineering Physics Lab X	PHYSICS	PH			2	1	50	50	100	3
07	ES	HS-EV107	Environmental Studies X	HUMANITY SC	HS	2			1	50		50	
08	HS	HS-EN108	Professional English	HUMANITY SC	HS	2			0	50		50	
<b>Total</b>						18	01	8	20	400	300	700	

L-Lecture, T-Tutorial, P-Practical, CIE-Continuous Internal Evaluation, SEE-Semester End Examination

There is no Semester End Examination for English HS-EN108 and HS-EV107 Environmental studies but attendance should be minimum of 85% in theory and shall have obtained minimum of 40% in CIE (out of 50)

Dean (Academics)  
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**SCHEME OF TEACHING AND EXAMINATION 2021**  
**Choice Based Credit System (CBCS) (Effective from the academic year 2020-21)**  
**II SEMESTER**

II Semester B.E.(Common to All Branch) (CHEMISTRY CYCLE)					Teaching Hours/week				Examination				
Sl No.	Course Code		Course Title	Teaching Department	Board of Exam	L	T	P	Cr	CIE	SEE	Total Marks	Exam Hours
01	BS	BS-MA201	Advanced Calculus and Numerical Methods	MATHAS	MA	3	1		4	50	50	100	3
02	ES	ES-EEI202	Basic Electrical Engineering	CIVIL	CV	3			3	50	50	100	3
03	ES	ES-CE203	Elements of Civil Engineering	ELECTRICAL	EE	3		2	4	50	50	100	3
04	BS	BS-PH204	Engineering Physics	PHYSICS	PH	3			3	50	50	100	3
05	ES	ES-ME205	Computer Aided Engineering Design	MECHANICAL	ME	2		4	4	50	50	100	3
06	BS	BS-PHL206	Engineering Physics Lab	PHYSICS	PH			2	1	50	50	100	3
07	ES	HS-EV207	Environmental Studies	HUMANITY SC	HS	2			1	50		50	
08	HS	HS-EN208	Professional English	HUMANITY SC	HS	2			0	50		50	
<b>Total</b>						18	01	8	20	400	300	700	

L-Lecture, T-Tutorial, P-Practical, CIE-Continuous Internal Evaluation, SEE-Semester End Examination

There is no Semester End Examination for English HS-EN208 and HS-EV207 Environmental studies but attendance should be minimum of 85% in theory and shall have obtained minimum of 40% in CIE (out of 50)

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**SCHEME OF TEACHING AND EXAMINATION 2021**  
**Choice Based Credit System (CBCS) (Effective from the academic year 2020-21)**  
**II SEMESTER**

II Semester B.E.(Common to All Branch) (PHYSICS CYCLE)					Teaching Hours/week				Examination				
Sl No	Course Code		Course Title	Teaching Department	Board of Exam	L	T	P	Cr	CIE	SEE	Total Marks	Exam Hours
01	BS	BS-MA201	Advanced Calculus and Numerical Methods	MATHS	MA	3	1	-	4	50	50	100	3
02	BS	ES-ECI202	Basic Electronics Engineering	ELECTRONICS	ME	3	-	-	3	50	50	100	3
03	ES	ES-ME203	Mechanical Engineering Science	MECHANICAL	EC	3	-	2	4	50	50	100	3
04	ES	BS-CH204	Engineering Chemistry	CHEMISTRY	CH	3	-	-	3	50	50	100	3
05	ES	ES-CS205	Programming with Problem Solving	COMPUTER SC	CS	3	1	-	4	50	50	100	3
06	BS	BS-CHL206	Engineering Chemistry Lab	CHEMISTRY	CH	-	-	2	1	50	50	100	3
07	ES	BS-CSL207	Programming Lab	COMPUTER SC	CS	-	-	2	1	50	50	100	3
08	HS	HS-CP208	Constitution of India and Professional Ethics	HUMANITY SC	HS	2	-	-	0	50		50	
08	HS	HS-KN209	Kannada	HUMANITY SC	HS	2	-	-	0	50		50	
<b>Total</b>						19	02	06	20	450	350	800	

L-Lecture, T-Tutorial, P-Practical, CIE-Continuous Internal Evaluation, SEE-Semester End Examination

**HS-KA209Kannada course will be conducted only for those students who have not pass Kannada qualifying examination**

There is no Semester End Examination for Constitution of India and Professional Ethics HS-CP208 but attendance should be minimum of 85% in theory and shall have obtained minimum of 40% in CIE (out of 50)

Sri Siddhartha Institute of Technology  
 Maralur, Tumkur  
 15-12-105

I / II Sem Syllabus

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### III Semester Scheme

III Semester B.E. (Common to all UG programs) (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)						Examination				
SI No.	Course Code	Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hours	
01	BS MA3TH1	Integral Transform and Numerical Techniques	MA	MA	4	50	50	100	3	
02	PC EE3TH2	Analog and Digital Electronics	EE	EE	3	50	50	100	3	
03	PC EE3TH3	Electric Circuit Analysis	EE	EE	3	50	50	100	3	
04	PC EE3TH4	DC Machines and Synchronous Machines	EE	EE	3	50	50	100	3	
05	PC EE3TH5	Electrical Measurements and Measuring Instruments	EE	EE	3	50	50	100	3	
06	ES / MA EE3TH6 / MA3DP6	Electric Power Generation Technology (Not for Diploma Students) Fundamental Mathematics (Only for Diploma students)	EE / MA	EE / MA	3	50	50	100	3	
07	PC EE3LB1	Analog and Digital Electronics Lab	EE	EE	1.5	50	50	100	3	
08	PC EE3LB2	Circuit Simulation and Measurements Lab	EE	EE	1.5	50	50	100	3	
09	PC EE3LB3	DC Machines and Synchronous Machines Lab	EE	EE	1.5	50	50	100	3	
10	HS SK3DP1	Skill Development-I	HS	HS	1	50	-	50	-	
<b>Total</b>						<b>24.5</b>	<b>500</b>	<b>450</b>	<b>950</b>	<b>-</b>

CIE- Continuous Internal Evaluation, SEE-Semester End Examination

Note: MA3DP6: DIP Mathematics for Lateral Entry students only.

There is no SEE for Skill Development-I course.

However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

Dean (Academics)

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### IV Semester Scheme

IV Semester B.E. (Common to all UG programs) (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)							Examination			
SI No	Course Code	Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hrs.	
01	BS MA4ES1	Probability and Complex Analysis	MA	MA	3	50	50	100	3	
02	PC EE4TH2	Power Electronics	EE	EE	3	50	50	100	3	
03	PC EE4TH3	Control Systems	EE	EE	3	50	50	100	3	
04	PC EE4TH4	Fields and Waves	EE	EE	3	50	50	100	3	
05	PC EE4TH5	Transformers and Induction Machines	EE	EE	3	50	50	100	3	
06	PC EE4TH6	Electrical Power Transmission and Distribution	EE	EE	3	50	50	100	3	
07	PC EE4LB1	Power Electronics Lab	EE	EE	1.5	50	50	100	3	
08	PC EE4LB2	Control Systems Lab	EE	EE	1.5	50	50	100	3	
09	PC EE4LB3	Transformers and Induction Machines Lab	EE	EE	1.5	50	50	100	3	
10	HS SK4DP2	Skill Development-II	HS	HS	1	50	-	50	-	
<b>Total</b>						<b>23.5</b>	<b>500</b>	<b>450</b>	<b>950</b>	<b>-</b>

CIE-Continuous Internal Evaluation, SEE-Semester End Examination

Note: MA4EE1: Engineering mathematics-IV is not common for all Branches (Syllabus is based on Department request).

There is no SEE for Skill Development-II course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

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DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING  
III SEMESTER B.E.

SI No.	Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hours
01	BS	MA3TH1	Integral Transform and Numerical Methods	MA	MA	4	50	50	100	3
02	PC	ET3TH2	Signals and Systems	ET	ET	3	50	50	100	3
03	PC	ET3TH3	Network Analysis	ET	ET	3	50	50	100	3
04	PC	ET3TH4	Analog Electronic Circuits	ET	ET	3	50	50	100	3
05	PC	ET3TH5	Digital Electronic Circuit Design using Verilog	ET	ET	3	50	50	100	3
06	ES/MA	ET3TH6/MA3DP6	Electronic Instrumentation/ Fundamental Mathematics	ET/MA	ET/MA	3	50	50	100	3
07	PC	ET3LB1	Signals and Systems Lab	ET	ET	1.5	50	50	100	3
08	PC	ET3LB2	Analog Electronic Circuits Lab	ET	ET	1.5	50	50	100	3
09	PC	ET3LB3	Digital Electronic Circuit Design using Verilog Lab	ET	ET	1.5	50	50	100	3
10	HS	SK3DP1	Skill Development-I	HS	HS	1	50	-	50	-
Total						24.5	500	450	950	-
CIE-Continuous Internal Evaluation, SEE-Semester End Examination										

**Note:MA3DP6: DIP Mathematics for Lateral Entry students only. There is no SEE for Skill Development-I course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.**



IV Semester B.E.

SL No	Course and Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hrs.
01	BS	MA4ES1	Probability and Complex Analysis	MA	MA	3	50	50	100	3
02	PC	ET4TH2	Sensors and Applications	ET	ET	3	50	50	100	3
03	PC	ET4TH3	Fields and Waves	ET	ET	3	50	50	100	3
04	PC	ET4TH4	Analog and Digital Communication	ET	ET	3	50	50	100	3
05	PC	ET4TH5	Microcontroller and Embedded Systems	ET	ET	3	50	50	100	3
06	PC	ET4TH6	Control Systems	ET	ET	3	50	50	100	3
07	PC	ET4LB1	Sensors and Applications Lab	ET	ET	1.5	50	50	100	3
08	PC	ET4LB2	Communication Lab-1	ET	ET	1.5	50	50	100	3
09	PC	ET4LB3	Microcontroller Lab	ET	ET	1.5	50	50	100	3
10	HS	SK4DP2	Skill Development-II	HS	HS	1	50	-	50	-
Total						23.5	500	450	850	-
CIE-Continuous Internal Evaluation, SEE-Semester End Examination										

**Note:** MA4\*\*1: Engineering mathematics-IV is not common for all Branches (Syllabus is based on Department request). There is no SEE for Skill Development-II course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject. Question paper Pattern: Two Questions will be set from each unit and student is expected to answer anyone.

Electronics and Telecommunication Engineering

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SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU  
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**CHOICE BASED CREDIT SYSTEM (CBCS)**  
SCHEME OF TEACHING AND EXAMINATION FOR BE DEGREE COURSE  
(Effective from the academic year 2021-22)



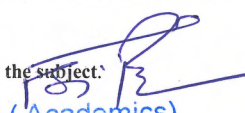
**Department of Medical Electronics**  
**III SEMESTER B.E.**

Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)								Examination			
Sl No.	Course Code		Course Title	Teaching dept.	Board of Exam.	L-T-P	Credits	CIE	SEE	Total Marks	Exam Hours
01	BS	MA3TH1	Integral Transform and Numerical Methods	MA	MA	4-0-0	4	50	50	100	3
02	PC	ML3TH2	Oops with C++	ML	ML	3-0-0	3	50	50	100	3
03	PC	ML3TH3	Human Anatomy and Physiology	ML	ML	3-0-0	3	50	50	100	3
04	PC	ML3TH4	Biomedical Instrumentation	ML	ML	3-0-0	3	50	50	100	3
05	PC	ML3TH5	Analog and Digital Electronic Circuits	ML	ML	3-0-0	3	50	50	100	3
06	ES/ MA	ML3TH6/ MA3DP6	Biosensors and Measurements/ DIP Mathematics	ML/ MA	ML/ MA	3-0-0	3	50	50	100	3
07	PC	ML3LB1	Biomedical Instrumentation Lab	ML	ML	0-0-3	1.5	50	50	100	3
08	PC	ML3LB2	Analog and Digital Electronics circuits Lab	ML	ML	0-0-3	1.5	50	50	100	3
09	PC	ML3LB3	Oops with C++ Lab	ML	ML	0-0-3	1.5	50	50	100	3
10	HS	SK3DP1	Skill Development-I	HS	HS	1-0-0	1	50	-	50	-
Total							24.5	500	450	950	-
CIE-Continuous Internal Evaluation, SEE-Semester End Examination											

**Note:** MA3DP6: DIP Mathematics for Lateral Entry students only.

There is no SEE for Skill Development-I course.

However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

  
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**SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU**  
(A constituent College of Siddhartha Academy of Higher Education, Tumakuru)  
**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**SCHEME OF TEACHING AND EXAMINATION FOR BE DEGREE COURSE**  
(Effective from the academic year 2021-22)

**Department of Medical Electronics**  
**IV SEMESTER B.E.**

(Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)								
SI No	Course and Course Code		Course Title	Teaching dept.	Board of Exam.	L-T-P	Credits	CIE
01	BS	MA4ES1	Probability and Complex Analysis	MA	MA	3-0-0	3	50
02	PC	ML4TH2	Signals and Systems	ML	ML	3-0-0	3	50
03	PC	ML4TH3	Circuit Theory and Analysis	ML	ML	3-0-0	3	50
04	PC	ML4TH4	Physiological Control System	ML	ML	3-0-0	3	50
05	PC	ML4TH5	Linear Integrated Circuits	ML	ML	3-0-0	3	50
06	PC	ML4TH6	Microcontroller	ML	ML	3-0-0	3	50
07	PC	ML4LB1	Microcontroller Lab	ML	ML	0-0-3	1.5	50
08	PC	ML4LB2	Sensors and Measurements Lab	ML	ML	0-0-3	1.5	50
09	PC	ML4LB3	Signals and Control System Lab	ML	ML	0-0-3	1.5	50
10	HS	SK4DP2	Skill Development-II	HS	HS	1-0-0	1	50
Total							23.5	500
<b>CIE-Continuous Internal Evaluation, SEE-Semester End Examination</b>								

**Note:** MA4\*\*1: Engineering mathematics-IV is not common for all Branches (Syllabus is based on Department request).  
There is no SEE for Skill Development-II course. However, all the students should maintain a minimum 85% of attendance an

**	Old Code	New Code
CSE and ISE	18CS401	MA4CS1
EE, EC, ETC AND ML	18ES401	MA4ES1
ME, CVL, IEM	18MA401	MA4ME1

**Dean (Academics)**  
Sri Siddhartha Institute of Technology  
Maralur, Tumkur - 572 105.



**DEPARTMENT OF MECHANICAL ENGINEERING**  
**SCHEME OF TEACHING AND EXAMINATION**  
Choice Based Credit System (CBCS) (Effective from the academic year 2022-23)  
**III SEMESTER**

III Semester B.E. Mechanical Engineering / Industrial Engineering Management						
Sl. No.	Course Code		Course Title	Teaching Dept.	Board of Exam.	Credits
1.	BS	MA3TH1	Integral Transforms and Numerical Techniques	MA	MA	4
2.	PC	ME3TH2	Management & Entrepreneurship	ME	ME	3
3.	PC	ME3TH3	Engineering Thermodynamics	ME	ME	3
4.	PC	ME3TH4	Engineering Mechanics	ME	ME	3
5.	PC	ME3TH5	Mechanical Measurements and Metrology	ME	ME	3
6.	ES/ MA	ME3TH6/ MA3DP6	Metal Casting and Forming Process/DIP Mathematics*	ME/MA	ME/MA	3
7.	PC	ME3LB1	Computer Aided Machine Drawing	ME	ME	1.5
8.	PC	ME3LB2	Measurements and Metrology Lab	ME	ME	1.5
9.	PC	ME3LB3	Basic W/S Practice Lab	ME	ME	1.5
10.	HS	SK3DP1	Skill Development – I*	HS	HS	1
<b>TOTAL</b>						<b>24.5</b>
CIE-Continuous Internal Evaluation, SEE-Semester End Examination						

- MA3DP6: DIP Mathematics for lateral entry students only
- There is no SEE for Skill Development -I Course, however all the Students Should maintain minimum 85% of attendance and 40% of CIE to get pass in the subject.

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**DEPARTMENT OF MECHANICAL ENGINEERING**  
**SCHEME OF TEACHING AND EXAMINATION**  
**Choice Based Credit System (CBCS) (Effective from the academic year 2022-23)**  
**IV SEMESTER**

IV Semester B.E. Mechanical Engineering / Industrial Engineering Management						
Sl. No.	Course Code		Course Title	Teaching Dept.	Board of Exam.	Credits
1.	BS	MA4ME1	Engineering Mathematics-IV*	MA	MA	3
2.	PC	ME4TH2	Fluid Mechanics	ME	ME	3
3.	PC	ME4TH3	Kinematics of Machines	ME	ME	3
4.	PC	ME4TH4	Mechanics of Materials	ME	ME	3
5.	PC	ME4TH5	Machine Tools & Machining Process	ME	ME	3
6.	PC	ME4TH6	Material Science and Metallurgy	ME	ME	3
7.	PC	ME4LB1	Manufacturing Process Lab	ME	ME	1.5
8.	PC	ME4LB2	Material Testing & Metallography Lab	ME	ME	1.5
9.	PC	ME4LB3	Production Technology Lab	ME	ME	1.5
10.	HS	SK4DP2	Skill Development – II*	HS	HS	1
<b>TOTAL</b>						<b>23.5</b>
<b>CIE-Continuous Internal Evaluation, SEE-Semester End Examination</b>						

- MA4TH1: Engineering Mathematics is not common for all the branches (syllabus is based on department request)
- There is no SEE for Skill Development -I Course, however all the Students Should maintain minimum 85% of attendance and 40% of CIE to get pass in the subject.

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### III SEMESTER B.E.

III Semester B.E. (Common to all UG programs) (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.)						Examination				
Sl No.	Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hours
01	BS	MA3TH1	Integral Transform and Numerical Methods	MA	MA	4	50	50	100	3
02	PC	CE3TH2	Applied Mechanics	CE	CE	3	50	50	100	3
03	PC	CE3TH3	Engineering Geology	CE	CE	3	50	50	100	3
04	PC	CE3TH4	Fluid Mechanics	CE	CE	3	50	50	100	3
05	PC	CE3TH5	Building Planning and Drawing	CE	CE	3	50	50	100	3
06	ES/ MA	CE3TH6/ MA3DP6	Surveying / DIP Mathematics	CE/ MA	CE/ MA	3	50	50	100	3
07	PC	CE3LB1	Hydraulics and Hydraulic Machines Lab	CE	CE	1.5	50	50	100	3
08	PC	CE3LB2	Surveying Practice - I	CE	CE	1.5	50	50	100	3
09	PC	CE3LB3	Auto CAD Lab	CE	CE	1.5	50	50	100	3
10	HS	SK3DP1	Skill Development-I	HS	HS	1	50	-	50	-
Total						24.5	500	450	950	-
CIE-Continuous Internal Evaluation, SEE-Semester End Examination										

Note: MA3DP6: DIP Mathematics for Lateral Entry students only.

There is no SEE for Skill Development-I course.

However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

Academic year 2022-23

3<sup>rd</sup> & 4<sup>th</sup> Sem

Dept. of Civil Engineering

Dean (Academics)  
Sri Siddhartha Institute of Technology  
Maralur, Tumkur - 572 105.



## IV SEMESTER B.E.

IV Semester B.E. (Common to all UG programs) (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.)							Examination			
SI No	Course and Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hrs.
01	BS	MA4TH1	Probability and Calculus of Variations	MA	MA	3	50	50	100	3
02	PC	CE4TH2	Strength of Materials	CE	CE	3	50	50	100	3
03	PC	CE4TH3	Concrete Technology	CE	CE	3	50	50	100	3
04	PC	CE4TH4	Hydraulics and Hydraulic Machines	CE	CE	3	50	50	100	3
05	PC	CE4TH5	Building materials and construction management	CE	CE	3	50	50	100	3
06	PC	CE4TH6	Geotechnical Engineering-I	CE	CE	3	50	50	100	3
07	PC	CE4LB1	Basic Material Testing Lab	CE	CE	1.5	50	50	100	3
08	PC	CE4LB2	Surveying practice - II	CE	CE	1.5	50	50	100	3
09	PC	CE4LB3	Engineering Geology Lab	CE	CE	1.5	50	50	100	3
10	HS	SK4DP2	Skill Development-II	HS	HS	1	50	50	100	3
Total						23.5	500	450	850	-
CIE-Continuous Internal Evaluation, SEE-Semester End Examination										

**Note:** MA4\*\*1: Engineering mathematics-IV is not common for all Branches (Syllabus is based on Department request). There is no SEE for Skill Development-II course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.



**SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU**  
 (A constituent College of Siddhartha Academy of Higher Education, Tumakuru)  
 CHOICE BASED CREDIT SYSTEM (CBCS)  
 SCHEME OF TEACHING AND EXAMINATION FOR BE DEGREE COURSE  
 (Effective from the academic year 2020-21)  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION**  
 Academic Year 2022-23



III Semester B.E. ECE (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)							Examination			
Sl No	Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hours
01	BS	MA3TH1	Integral Transform and Numerical Techniques	MA	MA	4.0	50	50	100	3
02	PC	EC3TH2	Signals and Systems	EC	EC	3.0	50	50	100	3
03	PC	EC3TH3	Network Theory	EC	EC	3.0	50	50	100	3
04	PC	EC3TH4	Analog Electronic Circuits	EC	EC	3.0	50	50	100	3
05	PC	EC3TH5	Digital Electronic Circuits	EC	EC	3.0	50	50	100	3
06	ES/ MA	EC3TH6/ MA3DP6	Electronic Instrumentation/ DIP Mathematics	EC/ MA	EC/ MA	3.0	50	50	100	3
07	PC	EC3LB1	Signals and Systems Lab	EC	EC	1.5	50	50	100	3
08	PC	EC3LB2	Analog Electronic Circuits Lab	EC	EC	1.5	50	50	100	3
09	PC	EC3LB3	Digital Electronic Circuits Lab	EC	EC	1.5	50	50	100	3
10	HS	SK3DP1	Skill Development-I	HS	HS	1.0	50	-	50	-
Total						24.5	500	450	950	-

**CIE-Continuous Internal Evaluation, SEE-Semester End Examination**

*Note:* MA3DP6: DIP Mathematics for Lateral Entry students only. There is no SEE for Skill Development-I course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

IV Semester B.E. ECE (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)							Examination			
Sl No	Course and Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hrs.
01	BS	MA4ES1	Probability and Complex Analysis	MA	MA	3.0	50	50	100	3
02	PC	EC4TH2	Digital System Design using Verilog	EC	EC	3.0	50	50	100	3
03	PC	EC4TH3	Fields and waves	EC	EC	3.0	50	50	100	3
04	PC	EC4TH4	Analog Communication	EC	EC	3.0	50	50	100	3
05	PC	EC4TH5	Microcontroller and Its Applications	EC	EC	3.0	50	50	100	3
06	PC	EC4TH6	Control Systems	EC	EC	3.0	50	50	100	3
07	PC	EC4LB1	Verilog Lab	EC	EC	1.5	50	50	100	3
08	PC	EC4LB2	Analog Communication Lab	EC	EC	1.5	50	50	100	3
09	PC	EC4LB3	Microcontroller Lab	EC	EC	1.5	50	50	100	3
10	HS	SK4DP2	Skill Development-II	HS	HS	1.0	50	-	50	-
Total						23.5	500	450	950	-

**CIE-Continuous Internal Evaluation, SEE-Semester End Examination**

*Note:* MA4\*\*1: Engineering mathematics-IV is not common for all Branches (Syllabus is based on Department request). There is no SEE for Skill Development-II course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.



# SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU

(A constituent College of Siddhartha Academy of Higher Education, Tumakuru)



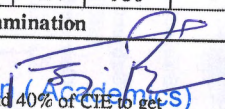
## CHOICE BASED CREDIT SYSTEM (CBCS) SCHEME OF TEACHING AND EXAMINATION FOR B.E. DEGREE COURSE – 2022-23 (Effective from the academic year 2020-21)

III Semester B.E. Information Science and Engineering (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Engg. & Tech.- Jan. 2018)						Teaching Hours /Week		Examination				
Sl No.	Course Code		Course Title	Teaching Department	Board of Exam	Credits	L	P	CIE	SEE	Total Marks	Exam Hours
01	BS	MA3CS1/M A3IS1	Statistics and Probability	MA	MA	4	4	-	50	50	100	3
02	PC	IS3TH2	Discrete Mathematical Structures	ISE	ISE	3	3	-	50	50	100	3
03	PC	IS3TH3	UNIX and SHELL Programming	ISE	ISE	3	3	-	50	50	100	3
04	PC	IS3TH4	Data Structures and its Applications	ISE	ISE	3	3	-	50	50	100	3
05	PC	IS3TH5	Object Oriented Programming	ISE	ISE	3	3	-	50	50	100	3
06	PC/ MA	IS3TH6/MA 3DP6	Digital Design and Computer Organization/Fundamental Mathematics	ISE/MA	ISE/MA	3	3	-	50	50	100	3
07	PC	IS3LB1	UNIX and SHELL Programming Laboratory	ISE	ISE	1.5	-	3	50	50	100	3
08	PC	IS3LB2	Data Structures Laboratory	ISE	ISE	1.5	-	3	50	50	100	3
09	PC	IS3LB3	Object Oriented Programming Laboratory	ISE	ISE	1.5	-	3	50	50	100	3
10	HS	SK3DP1	Skill Development-I	HS	HS	1	-	2	50	-	50	-
<b>Total</b>						<b>24.5</b>	<b>19</b>	<b>11</b>	<b>500</b>	<b>450</b>	<b>950</b>	<b>-</b>

L-Lecture Hours, P-Practical Hours, CIE-Continuous Internal Evaluation, SEE-Semester End Examination

**Note:**

- MA3DP6: Fundamental Mathematics - for Lateral Entry students only.
- There is no SEE for Skill Development-I course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

  
 Head (Academics)  
 Sri Siddhartha Institute of Technology  
 Maralur, Tumkur - 572 105.



# SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU

(A constituent College of Siddhartha Academy of Higher Education, Tumakuru)



## CHOICE BASED CREDIT SYSTEM (CBCS)

### SCHEME OF TEACHING AND EXAMINATION FOR B.E. DEGREE COURSE – 2022-23

(Effective from the academic year 2020-21)

IV Semester B.E. Information Science and Engineering							Teaching Hours /Week		Examination			
(Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Engg. & Tech.- Jan. 2018)												
Sl No.	Course Code		Course Title	Teaching Department	Board of Exam	Credits	L	P	CIE	SEE	Total Marks	Exam Hours
01	BS	MA4CS1 /MA4IS1	Combinatorics and Linear Algebra	MA	MA	3	3	-	50	50	100	3
02	PC	IS4TH2	Operating Systems	ISE	ISE	3	3	-	50	50	100	3
03	PC	IS4TH3	Algorithm Design and Analysis	ISE	ISE	3	3	-	50	50	100	3
04	PC	IS4TH4	Computer Networks-1	ISE	ISE	3	3	-	50	50	100	3
05	PC	IS4TH5	Python for Data Processing	ISE	ISE	3	3	-	50	50	100	3
06	PC	IS4TH6	Microprocessor and Embedded System	ISE	ISE	3	3	-	50	50	100	3
07	PC	IS4LB1	Algorithms Laboratory	ISE	ISE	1.5	-	3	50	50	100	3
08	PC	IS4LB2	Data Processing Laboratory	ISE	ISE	1.5	-	3	50	50	100	3
09	PC	IS4LB3	Microprocessor and Microcontroller Laboratory	ISE	ISE	1.5	-	3	50	50	100	3
10	HS	SK4DP2	Skill Development-II	HS	HS	1	-	2	50	-	50	-
<b>Total</b>						<b>23.5</b>	<b>18</b>	<b>11</b>	<b>500</b>	<b>450</b>	<b>950</b>	
L-Lecture Hours, P-Practical Hours, CIE-Continuous Internal Evaluation, SEE-Semester End Examination												

**Note:**

- There is no SEE for Skill Development-II course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

Dean (Academics)  
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**SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU**  
(A constituent College of Siddhartha Academy of Higher Education, Tumakuru)  
**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**SCHEME OF TEACHING AND EXAMINATION FOR BE DEGREE COURSE**  
(Effective from the academic year 2020-21)



**III SEMESTER B.E.**

III Semester B.E. Computer Science and Engineering						Teaching Hours/week				Examination			
(Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)						L	T	P	C	Duration in Hrs.	CI E	SEE	Total Marks
Sl No.	Course and Course Code		Course Title	Teaching dept.	Board of Exam								
01	BS	MA3CS1/ MA3IS1	Statistics and Probability	MA	MA	4	-	-	4	3	50	50	100
02	PC	CS3TH2	Object Oriented Programming	CS	CS	3	-	-	3	3	50	50	100
03	PC	CS3TH3	Data Structures	CS	CS	3	-	-	3	3	50	50	100
04	PC	CS3TH4	Discrete Mathematical Structures	CS	CS	3	-	-	3	3	50	50	100
05	PC	CS3TH5	Digital Circuit Design and its Applications	CS	CS	3	-	-	3	3	50	50	100
06	ES/ MA	CS3TH6/ MA3DP6	Computer Organization/ DIP Mathematics	CS /MA	CS/MA	3	-	-	3	3	50	50	100
07	PC	CS3LB1	Object Oriented Programming Lab	CS	CS	-	-	3	1.5		50	50	100
08	PC	CS3LB2	Data Structures Lab	CS	CS	-	-	3	1.5	3	50	50	100
09	PC	CS3LB3	Digital Circuit Design Lab	CS	CS	-	-	3	1.5	3	50	50	100
10	HS	SK3DP1	Skill Development-I	HS	HS	-	-	2	1	3	50	-	50
						<b>19</b>	<b>-</b>	<b>11</b>	<b>24.5</b>	<b>27</b>	<b>500</b>	<b>450</b>	<b>950</b>

**Note:** MA3DP6: DIP Mathematics for Lateral Entry students only.

There is no SEE for Skill Development-I course.

However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

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**SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU**  
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**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**SCHEME OF TEACHING AND EXAMINATION FOR BE DEGREE COURSE**  
(Effective from the academic year 2020-21)



**IV SEMESTER B.E.**

III Semester B.E. Computer Science and Engineering (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)					Teaching Hours/week				Examination				
Sl No.	Course and Course Code		Course Title	Teaching dept.	Board of Exam	L	T	P	C	Duration in Hrs.	CI	SEE	Total Marks
01	BS	MA4CS1	Combinatorics and Linear Algebra	MA	MA	3	-	-	3	3	50	50	100
02	PC	CS4TH2	Design and Analysis of Algorithms	CS	CS	3	-	-	3	3	50	50	100
03	PC	CS4TH3	Operating Systems	CS	CS	3	-	-	3	3	50	50	100
04	PC	CS4TH4	Programming with Python	CS	CS	3	-	-	3	3	50	50	100
05	PC	CS4TH5	Automata Theory and Computation	CS	CS	3	-	-	3	3	50	50	100
06	PC	CS4TH6	Software Engineering	CS	CS	3	-	-	3	3	50	50	100
07	PC	CS4LB1	Algorithms Lab	CS	CS	-	-	3	1.5	3	50	50	100
08	PC	CS4LB2	Operating Systems Lab	CS	CS	-	-	3	1.5	3	50	50	100
09	PC	CS4LB3	Python Programming Lab	CS	CS	-	-	3	1.5	3	50	50	100
10	HS	SK4DP2	Skill Development-II	HS	HS	-	-	2	1	3	50	-	50
						<b>18</b>	<b>-</b>	<b>11</b>	<b>23.5</b>	<b>27</b>	<b>500</b>	<b>450</b>	<b>950</b>

Note: There is no SEE for Skill Development-II course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

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SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU  
(A constituent College of Siddhartha Academy of Higher Education, Tumakuru)  
CHOICE BASED CREDIT SYSTEM (CBCS)  
SCHEME OF TEACHING AND EXAMINATION FOR BE DEGREE COURSE  
(Effective from the academic year 2020-21)



Department of Medical Electronics  
V SEMESTER B.E.

(Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)								Examination			
SI No	Course and Course Code	Course Title	Teaching dept.	Board of Exam.	L-T-P	Credits	CIE	SEE	Total Marks	Exam Hrs.	
01	PC ML5TH1	Patient Monitoring Systems	ML	ML	3-0-0	3	50	50	100	3	
02	PC ML5TH2	Digital Signal Processing	ML	ML	3-0-0	3	50	50	100	3	
03	PC ML5TH3	Bio-optics	ML	ML	3-0-0	3	50	50	100	3	
04	PC ML5TH4	Digital Image Processing	ML	ML	3-0-0	3	50	50	100	3	
05	PE ML5PE5x	Professional Elective-I	ML	ML	3-0-0	3	50	50	100	3	
06	OE ML5OE6x	Open Elective-I	ML	ML	3-0-0	3	50	50	100	3	
07	PC ML5MP1	Mini Project-I	ML	ML	0-0-4	2	50	50	100	3	
08	PC ML5LB1	Python Lab	ML	ML	1-0-2	1.5	50	50	100	3	
09	PC ML5LB2	Digital Signal Processing Lab	ML	ML	0-0-3	1.5	50	50	100	3	
10	HS SK5DP3	Skill Development-III	HS	HS	1-0-0	1	50	-	50	-	
Total							24	500	450	950	

CIE-Continuous Internal Evaluation, SEE-Semester End Examination

**Note:** There is no SEE for Skill Development-III course.

However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

Professional Elective I:	Open Elective I:
ML5PE51: Medical Physics ML5PE52: Embedded System Design and ARM Processor ML5PE53: Biostatistics	ML5OE61: Biomedical Instrumentation

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**SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU**  
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**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**SCHEME OF TEACHING AND EXAMINATION FOR BE DEGREE COURSE**  
(Effective from the academic year 2020-21)



**Department of Medical Electronics**  
**VI SEMESTER B.E.**

(Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)											
Sl No	Course and Course Code		Course Title	Teaching dept.	Board of Exam.	L-T-P	Credits	Examination			
								CIE	SEE	Total Marks	Exam Hrs.
01	PC	ML6TH1	Principles of Medical Imaging Modalities	ML	ML	3-0-0	3	50	50	100	3
02	PC	ML6TH2	Medical Image Analysis	ML	ML	3-0-0	3	50	50	100	3
03	PC	ML6TH3	Medical Device Regulations and IPR	ML	ML	3-0-0	3	50	50	100	3
04	PE	ML6PE4x	Professional Elective-II	ML	ML	3-0-0	3	50	50	100	3
05	OE	ML6OE5x	Open Elective-II	ML	ML	3-0-0	3	50	50	100	3
06	PC	ML6MP1	Mini Project-II	ML	ML	0-0-6	3	50	50	100	3
07	PC	ML6LB1	Medical Image Analysis Lab	ML	ML	0-0-3	1.5	50	50	100	3
08	PC	ML6LB2	Advance Biomedical Instrumentation Lab	ML	ML	0-0-3	1.5	50	50	100	3
09	HS	SKDP61	Skill Development-IV	HS	HS	0-0-3	1	50	-	50	-
Total							22	450	400	850	
CIE-Continuous Internal Evaluation, SEE-Semester End Examination											

There is no SEE for Skill Development-IV course.

However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

Professional Elective II:	Open Elective II:
ML6PE41: Sensors and Transducers ML6PE42: Pattern Recognition in Medicine ML6PE43: Brain Computer Interface	ML6OE51: Image Processing

**Dean (Academics)**  
Sri Siddhartha Institute of Technology  
Maralur, Tumkur - 572 105.



# SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY, TUMKUR

(A Constituent college of Sri Siddhartha Academy of Higher Education, Deemed to be University, under section 3 of UGC act 1956, Vide MHRD GOI Notification no.F9-31/2006-U.3(A) dated:30/05/2008).

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

(Accredited by NBA)



### Syllabus for 5<sup>th</sup> Semester (2020 Scheme)

V Semester B.E. Computer Science and Engineering (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Engg. & Tech.- Jan. 2018)						Teaching Hours/week				Examination			
Sl No.	Course and Course Code		Course Title	Teaching dept.	Board of Exam	L	T	P	C	Duration in Hrs.	CIE	SEE	Total Marks
01	PC	CS5TH1	Web Technologies	CS	CS	3	-	-	3	3	50	50	100
02	PC	CS5TH2	Object Oriented Modelling and Design	CS	CS	3	-	-	3	3	50	50	100
03	PC	CS5TH3	Data Communication	CS	CS	3	-	-	3	3	50	50	100
04	PC	CS5TH4	Database Management System	CS	CS	3	-	-	3	3	50	50	100
05	PE	CS5PE5x	Professional Elective-I	CS	CS	3	-	-	3	3	50	50	100
06	OE	CS5OE6x	Open Elective-I	CS	CS	3	-	-	3	3	50	50	100
07	PC	CS5MP1	Mini Project-I	CS	CS	-	-	4	2		50	50	100
08	PC	CS5LB1	Database Lab	CS	CS	-	-	3	1.5	3	50	50	100
09	PC	CS5LB2	Web Technology Lab	CS	CS	-	-	3	1.5	3	50	50	100
10	HS	SK5DP3	Skill Development-III	HS	HS	-	-	2	1	3	50	-	50
						<b>18</b>	<b>-</b>	<b>12</b>	<b>24</b>	<b>27</b>	<b>500</b>	<b>450</b>	<b>950</b>

Professional Elective I	Code	Subject Name	Open Elective I	Code	Subject Name
	CS5PE51	Advanced Data Structure		CS5OE61	Data Structure and Algorithm
	CS5PE52	Fundamentals of Digital Image Processing		CS5OE62	Database Management System
	CS5PE53	Unix System Programming		CS5OE63	Operating System

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 Sri Siddhartha Institute of Technology  
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**SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY, TUMKUR**  
 (A Constituent college of Sri Siddhartha Academy of Higher Education, Deemed to be University, under section 3 of UGC act 1956, Vide MHRD GOI Notification no.F9-31/2006-U,3(A) dated:30/05/2008)  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
 (Accredited by NBA)



**Syllabus for 6<sup>th</sup> Semester (2020 Scheme)**

<b>VI Semester B.E. Computer Science and Engineering</b> (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Engg. & Tech.- Jan. 2018)						<b>Teaching Hours/week</b>				<b>Examination</b>			
<i>Sl No.</i>	<i>Course and Course Code</i>		<i>Course Title</i>	<i>Teaching dept.</i>	<i>Board of Exam</i>	<i>L</i>	<i>T</i>	<i>P</i>	<i>C</i>	<i>Duration in Hrs.</i>	<i>CIE</i>	<i>SEE</i>	<i>Total Marks</i>
01	PC	CS6TH1	Artificial Intelligence and Machine Learning	CS	CS	3	-	-	3	3	50	50	100
02	PC	CS6TH2	Compiler Design	CS	CS	3	-	-	3	3	50	50	100
03	PC	CS6TH3	Computer Networks	CS	CS	3	-	-	3	3	50	50	100
04	PC	CS6PE4x	Professional Elective-II	CS	CS	3	-	-	3	3	50	50	100
05	PE	CS6OE5x	Open Elective-II	CS	CS	3	-	-	3	3	50	50	100
06	OE	CS6MP1	Mini Project-II	CS	CS	-	-	6	3	3	50	50	100
07	PC	CS6LB1	Machine Learning Lab	CS	CS	-	-	3	1.5	3	50	50	100
08	PC	CS6LB2	Computer Networks Lab	CS	CS	-	-	3	1.5	3	50	50	100
09	HS	SK6DP4	Skill Development-IV	HS	HS	-	-	2	1	3	50	-	50
						15	-	14	22	27	450	400	850

Professional Elective II	CODE	Name	Open Elective II	CODE	Name
	CS6PE41	Information Storage Management		CS6OE51	Java Programming
	CS6PE42	IOT		CS6OE52	Python Programming
	CS6PE43	Data Science			

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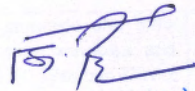
Dean (Academics)  
 Sri Siddhartha Institute of Technology  
 Maralur, Tumkur - 572 105.

V Semester B.E. ECE (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)							Examination			
Sl	Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hrs.
01	PC	EC5TH1	Digital Signal Processing	ECE	ECE	3	50	50	100	3
02	PC	EC5TH2	Embedded System Design	ECE	ECE	3	50	50	100	3
03	PC	EC5TH3	Fundamentals of CMOS VLSI Design	ECE	ECE	3	50	50	100	3
04	PC	EC5TH4	Microwave Theory and Antennas	ECE	ECE	3	50	50	100	3
05	PE	EC5PE5x	Professional Elective-I	ECE	ECE	3	50	50	100	3
06	OE	EC5OE6x	Open Elective-I	ECE	ECE	3	50	50	100	3
07	PC	EC5MP1	Mini Project-I	ECE	ECE	2	50	50	100	3
08	PC	EC5LB1	DSP Lab	ECE	ECE	1.5	50	50	100	3
09	PC	EC5LB2	VLSI Lab	ECE	ECE	1.5	50	50	100	3
10	HS	SK5DP3	Skill Development-III	HS	HS	1	50	-	50	-
<b>Total</b>						<b>24</b>	<b>500</b>	<b>450</b>	<b>950</b>	

**CIE-Continuous Internal Evaluation, SEE-Semester End Examination**

There is no SEE for Skill Development-IV Course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject (SK5DP3).

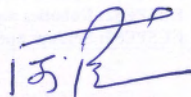
Professional Elective I:	Open Elective I:
EC5PE51: Python Programming EC5PE52: Robotics and Automation EC5PE53: Sensors and Signal Conditioning	EC5OE61: Information Theory and Coding EC5OE62: Sensors and Instrumentation

  
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VI Semester B.E. ECE (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)							Examination			
SI	Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hrs.
01	PC	EC6TH1	Digital Communication	ECE	ECE	3	50	50	100	3
02	PC	EC6TH2	Digital Image Processing	ECE	ECE	3	50	50	100	3
03	PC	EC6TH3	Computer Communication Networks	ECE	ECE	3	50	50	100	3
04	PE	EC6PE4x	Professional Elective-II	ECE	ECE	3	50	50	100	3
05	OE	EC6OE5x	Open Elective-II	ECE	ECE	3	50	50	100	3
06	PC	EC6MP2	Mini Project-II	ECE	ECE	3	50	50	100	3
07	PC	EC6LB1	Advanced Communication Lab	ECE	ECE	1.5	50	50	100	3
08	PC	EC6LB2	CCN Lab	ECE	ECE	1.5	50	50	100	3
09	HS	SK6DP4	Skill Development-IV	HS	HS	1	50	-	50	-
<b>Total</b>						<b>22</b>	<b>450</b>	<b>400</b>	<b>850</b>	
<b>CIE-Continuous Internal Evaluation, SEE-Semester End Examination</b>										

There is no SEE for Skill Development-IV course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

<b>Professional Elective II:</b>	<b>Open Elective II:</b>
EC6PE41: Analog and Mixed Signal VLSI Design EC6PE42: Artificial Intelligence EC6PE43: Cryptography and Information security	EC6OE51: Robotics EC6OE52: Pattern Recognition



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### V Semester Scheme

V Semester B.E. (Common to all UG programs: EE/EC/TC/ML/CS/IS/ ME/IM/CV) (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Engg. & Tech.- Jan. 2018)					Examination				
Sl No.	Course Code	Course Title	Teaching dept.	Board of Exam.	Credits	Duration in Hrs.	CIE	SEE	Total Marks
01	PC EE5TH1	PLC and SCADA	EEE	EEE	3	3	50	50	100
02	PC EE5TH2	Signals and Systems	EEE	EEE	3	3	50	50	100
03	PC EE5TH3	Electrical Machine Design	EEE	EEE	3	3	50	50	100
04	PC EE5TH4	Microcontroller and its Applications	EEE	EEE	3	3	50	50	100
05	PE EE5PE5x	Professional Elective-I	EEE	EEE	3	3	50	50	100
06	OE EE5OE6x	Open Elective-I	EEE	EEE	3	3	50	50	100
07	PC EE5MP1	Mini Project-I	EEE	EEE	2				
08	PC EE5LB1	PLC Lab	EEE	EEE	1.5	3	50	50	100
09	PC EE5LB2	Microcontroller Lab	EEE	EEE	1.5	3	50	50	100
10	HS SK5DP3	Skill Development-III	HS	HS	1	3	50	50	100
Total					24	27	450	450	900

Professional Elective I:	Open Elective I:
18EE5PE51: Advanced Control Systems	18EE5OE61: Energy Conversion Techniques
18EE5PE52: Illumination Engineering	18EE5OE62: Fundamentals of Illumination Engineering
18EE5PE53: Linear Integrated Circuits	

Note: Open Elective : The strength should be Min of 25 and Max of 55 to 60. In Place of Open Elective at V Sem , the students are encouraged to take Online course (Swayam/Mooc / Nptel /MIT –Coursera .....). The same is approved by concerned HEAD and DEAN (Academics) .

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### VI Semester Scheme

VI Semester B.E. (Common to all UG programs: EE/EC/TC/ML/CS/IS/ ME/IM/CV) (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Engg. & Tech.- Jan. 2018)							Examination			
Sl No.	Course Code	Course Title	Teaching dept.	Board of Exam.	Credits	Duration in Hrs.	CIE	SEE	Total Marks	
01	PC EE6TH1	Power System-1	EEE	EEE	3	3	50	50	100	
02	PC EE6TH2	Digital Signal Processing	EEE	EEE	3	3	50	50	100	
03	PC EE6TH3	Switchgear and High Voltage Engineering	EEE	EEE	3	3	50	50	100	
04	PE EE6PE4x	Professional Elective-II	EEE	EEE	3	3	50	50	100	
05	OE EE6OE5x	Open Elective-II	EEE	EEE	3	3	50	50	100	
06	PC EE6MP1	Mini Project-II	EEE	EEE	3	3	50	50	100	
07	PC EE6LB1	Computer Aided Electrical Drawing Lab	EEE	EEE	1.5	3	50	50	100	
08	PC EE6LB2	Relay and High Voltage Lab	EEE	EEE	1.5	3	50	50	100	
09	HS SK6DP4	Skill Development-IV	HS	HS	1	3	50	50	100	
Total					22	27	450	450	900	

Professional Elective II:	Open Elective II:
EE6PE41: Advanced Power Electronics	18EE6OE51: Programable Logic Controller
EE6PE42: Solar and Wind Energy Systems	18EE6OE52: Fundamentals of Renewable Energy Sources
EE6PE43: Python Application Programming	

Note: Open Elective : The strength should be Min of 25 and Max of 55 to 60. In Place of Open Elective at VI Sem , the students are encouraged to take Online course (Swayam/Mooc / Nptel /MIT –Coursera .....). The same is approved by concerned HEAD and DEAN(Academics).

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Maralur, Tumkur - 572 105.



**SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU**  
(A constituent College of Siddhartha Academy of Higher Education, Tumakuru)



V Semester B.E. (Common to all UG programs) (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)							Examination			
Sl No.	Course and Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hrs.
01	PC	ET5TH1	Information Theory and Error control coding	ET	ET	3	50	50	100	3
02	PC	ET5TH2	Digital Signal Processing & its application	ET	ET	3	50	50	100	3
03	PC	ET5TH3	Microwaves and Antennas	ET	ET	3	50	50	100	3
04	PC	ET5TH4	Management and Entrepreneurship	ET	ET	3	50	50	100	3
05	PE	ET5PE5x	Professional Elective-I	ET	ET	3	50	50	100	3
06	OE	ET5OE61	Open Elective-I	ET	ET	3	50	50	100	3
07	PC	ET5MP1	Mini Project-I	ET	ET	2	50	50	100	3
08	PC	ET5LB1	Microwave and Antenna Lab	ET	ET	1.5	50	50	100	3
09	PC	ET 5LB2	Digital Signal Processing Lab	ET	ET	1.5	50	50	100	3
10	HS	SK5DP3	Skill Development-III	HS	HS	1	50	-	50	-
<b>Total</b>						<b>24</b>	<b>500</b>	<b>450</b>	<b>950</b>	

**CIE-Continuous Internal Evaluation, SEE-Semester End Examination**

There is no SEE for Skill Development-IV Course.

**However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.**

<b>Professional Elective I:</b> ET5PE51: Digital Switching Systems ET5PE52: Micro Electro Mechanical Systems	<b>Open Elective I:</b> ET5OE61: Principles of Communication Systems
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**SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU**  
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VI Semester B.E. (Common to all UG programs) (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.- Jan. 2018)							Examination			
SI No.	Course and Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hrs.
01	PC	ET 6TH1	CMOS VLSI Design	ET	ET	3	50	50	100	3
02	PC	ET 6TH2	Wireless and Mobile Communication	ET	ET	3	50	50	100	3
03	PC	ET 6TH3	OOP with C++	ET	ET	3	50	50	100	3
04	PE	ET 6PE4x	Professional Elective-II	ET	ET	3	50	50	100	3
05	OE	ET 6OE51	Open Elective-II	ET	ET	3	50	50	100	3
06	PC	ET 6MP1	Mini Project-II	ET	ET	3	50	50	100	3
07	PC	ET 6LB1	Communication Systems Lab	ET	ET	1.5	50	50	100	3
08	PC	ET 6LB2	CMOS VLSI Design Lab	ET	ET	1.5	50	50	100	3
09	HS	SK6DP4	Skill Development-IV	HS	HS	1	50	-	50	-
<b>Total</b>						<b>22</b>	<b>450</b>	<b>400</b>	<b>850</b>	<b>-</b>
<b>CIE-Continuous Internal Evaluation, SEE-Semester End Examination</b>										

There is no SEE for Skill Development-IV course.

However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

Professional Elective II:	Open Elective II:
ET6PE41: Radar Systems ET6PE42: Automotive electronics	EC6OE51: Mobile Communication



### V SEMESTER B.E.

V Semester B.E. (Common to all UG programs) (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech)							Examination			
Sl No	Course and Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hrs.
01	PC	CE5TH1	Structural Analysis-I	CE	CE	3	50	50	100	3
02	PC	CE5TH2	Geotechnical Engineering -II	CE	CE	3	50	50	100	3
03	PC	CE5TH3	Design of RC Structures	CE	CE	3	50	50	100	3
04	PC	CE5TH4	Transportation Engineering	CE	CE	3	50	50	100	3
05	PE	CE5PE5x	Professional Elective-I	CE	CE	3	50	50	100	3
06	OE	CE5OE6x	Open Elective-I	CE	CE	3	50	50	100	3
07	PC	CE5MP1	Mini Project-I	CE	CE	2	50	50	100	3
08	PC	CE5LB1	Geotechnical Engineering Lab	CE	CE	1.5	50	50	100	3
09	PC	CE5LB2	Concrete & Highway Lab	CE	CE	1.5	50	50	100	3
10	HS	SK5DP3	Skill Development-III	HS	HS	1	50	-	50	-
Total						24	500	450	950	
CIE-Continuous Internal Evaluation, SEE-Semester End Examination										

**Note:** There is no SEE for Skill Development-III course.

However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

Professional Elective I:	Open Elective I:
CE5PE51: Hydrology and water resources	CE5OE61: Remote Sensing and GIS
CE5PE52: Alternative Building Materials	CE5OE62: Air Pollution and Control
CE5PE53: Traffic Engineering	CE5OE63: Environmental Impact Assessment



### VI SEMESTER B.E.

VI Semester B.E. (Common to all UG programs) (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Eng. & Tech.)							Examination			
Sl No	Course and Course Code		Course Title	Teaching dept.	Board of Exam.	Credits	CIE	SEE	Total Marks	Exam Hrs.
01	PC	CE6TH1	Structural Analysis-II	CE	CE	3	50	50	100	3
02	PC	CE6TH2	Design and Drawing of RC Structure	CE	CE	3	50	50	100	3
03	PC	CE6TH3	Environmental Engineering	CE	CE	3	50	50	100	3
04	PE	CE6PE4x	Professional Elective-II	CE	CE	3	50	50	100	3
05	OE	CE6OE5x	Open Elective-II	CE	CE	3	50	50	100	3
06	PC	CE6MP1	Mini Project-II	CE	CE	2	50	50	100	3
07	PC	CE6LB1	Software Engineering Lab	CE	CE	1.5	50	50	100	3
08	PC	CE6LB2	Construction Technology Lab & field visit	CE	CE	1.5	50	50	100	3
09	HS	SKDP61	Skill Development-IV	HS	HS	1	50	-	50	-
<b>Total</b>						<b>22</b>	<b>450</b>	<b>400</b>	<b>850</b>	<b>-</b>

CIE-Continuous Internal Evaluation, SEE-Semester End Examination

**Note:** There is no SEE for Skill Development-IV course.

However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

Professional Elective II:	Open Elective II:
CE6PE41: Highway Geometric Design CE6PE42: Construction Management & Entrepreneurship CE6PE43: Remote sensing & GIS	CE6OE51: Conservation of Natural resources CE6OE52: Solid Waste Management CE6OE53: Alternative Building Materials



DEPARTMENT OF MECHANICAL ENGINEERING

PROPOSED CURRICULUM OF V SEMESTER

2022-2023 BATCH

Sl. No	Sub. Code	Subject Title	L	T	P	C
1.	ME5TH1	DESIGN OF MACHINE ELEMENTS – 1	4	0	0	3
2.	ME5TH2	TURBOMACHINES	4	0	0	3
3.	ME5TH3	APPLIED THERMODYNAMICS	4	0	0	3
4.	ME5TH4	DYNAMICS OF MACHINES	4	0	0	3
5.	ME5PE5X	PROFESSIONAL ELECTIVE-1	3	0	0	3
6.	ME5OE6X	OPEN ELECTIVE-1	3	0	0	3
7.	ME5MP1	MINI PROJECT-1	0	0	4	2
7.	ME5LB1	I C ENGINES & FUELS LAB	0	0	3	1.5
8.	ME5LB2	FLUID MECHANICS AND FLUID MACHINERY LAB	0	0	3	1.5
9.	SK5DP3	SKILL DEVELOPMENT-III	-	-	2	1
<b>Total</b>			<b>22</b>	<b>00</b>	<b>12</b>	<b>24</b>

Professional Elective-I	
Sub. Code	Subject Title
ME5PE51	CAD/CAM & CIM
ME5PE52	MEMS & NANO TECHNOLOGY

Open Elective - I	
Sub. Code	Subject Title
ME5OE61	INDUSTRIAL DESIGN AND ERGONOMICS
ME5OE62	ENGINEERING ECONOMICS
ME5OE63	ENTERPRISE RESOURCE PLANNING
ME5OE64	HUMAN RESOURCE MANAGEMENT
ME5OE65	INTRODUCTION TO PROJECT MANAGEMENT

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DEPARTMENT OF MECHANICAL ENGINEERING

PROPOSED CURRICULUM OF VI SEMESTER

2022-2023 BATCH

Sl. No	Sub. Code	Subject Title	L	T	P	C
1.	ME6TH1	DESIGN OF MACHINE ELEMENTS – 2	4	0	0	3
2.	ME6TH2	AUTOMOTIVE ENGINEERING	4	0	0	3
3.	ME6TH3	HEAT & MASS TRANSFER	4	0	0	3
4.	ME6PE4X	PROFESSIONAL ELECTIVE-II	3	0	0	3
5.	ME6OE5X	OPEN ELECTIVE -II	3	0	0	3
6.	ME6MP1	MINI PROJECT	0	0	6	3
7.	ME6LB1	HEAT & MASS TRANSFER LAB	0	0	3	1.5
8.	ME6LB2	COMPUTER AIDED ENGINEERING LAB	0	0	3	1.5
9.	SK6DP4	SKILL DEVELOPMENT-IV	-	-	2	1
<b>Total</b>			<b>18</b>	<b>00</b>	<b>14</b>	<b>22</b>

Professional Elective-II	
Sub. Code	Subject Title
ME6PE41	FINITE ELEMENT METHODS
ME6PE42	ROBOTICS & ARTIFICIAL INTELLIGENCE

Open Elective - II	
Sub. Code	Subject Title
ME6OE51	PRODUCT DESIGN & DEVELOPMENT
ME6OE52	ELEMENTS OF OPERATION RESEARCH
ME6OE53	BUSINESS PROCESS REENGINEERING
ME6OE54	MIS & E COMMERCE
ME6OE55	ORGANIZATIONAL BEHAVIOR

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**CHOICE BASED CREDIT SYSTEM (CBCS)**

**SCHEME OF TEACHING AND EXAMINATION FOR B.E. DEGREE COURSE**  
(Effective from the academic year 2020-21)

**Academic Year 2022-23**

V Semester B.E. Information Science and Engineering (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Engg. & Tech.- Jan. 2018)							Teaching Hrs/Week		Examination			
Sl No.	Course and Course Code		Course Title	Teaching Department	Board of Exam	Credits	L	P	CIE	SEE	Total Marks	Exam Hrs
01	PC	IS5TH1	Computer Network-II	ISE	ISE	3	3	-	50	50	100	3
02	PC	IS5TH2	Advanced Java and J2EE	ISE	ISE	3	3	-	50	50	100	3
03	PC	IS5TH3	Database Management Systems	ISE	ISE	3	3	-	50	50	100	3
04	PC	IS5TH4	Introduction to Automata Theory and Computation	ISE	ISE	3	3	-	50	50	100	3
05	PE	IS5PE5x	Professional Elective-I	ISE	ISE	3	3	-	50	50	100	3
06	OE	IS5OE6x	Open Elective-I	ISE	ISE	3	3	-	50	50	100	3
07	PC	IS5MP1	Mini Project-I	ISE	ISE	2	-	3	50	50	100	3
08	PC	IS5LB1	Computer Networks Laboratory	ISE	ISE	1.5	-	3	50	50	100	3
09	PC	IS5LB2	Database Laboratory	ISE	ISE	1.5	-	3	50	50	100	3
10	HS	SK5DP3	Skill Development-III	HS	HS	1	-	2	50	-	50	-
<b>Total</b>						<b>24</b>	<b>18</b>	<b>11</b>	<b>500</b>	<b>450</b>	<b>950</b>	<b>-</b>

L-Lecture Hours, P-Practical Hours, CIE-Continuous Internal Evaluation, SEE-Semester End Examination

**Note:**

There is no SEE for Skill Development-III course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

Professional Elective-I	Open Elective-I
ISSPE51: Cloud Computing ISSPE52: Internet of Things ISSPE53: Research Methodology and Intellectual Property Rights	IS5OE61: Software Engineering IS5OE62: Fundamentals of Algorithms IS5OE63: Introduction to UNIX

*[Signature]*  
Dean (Academics)

Sri Siddhartha Institute of Technology

Department of Information Science and Engineering, Tumkur - 572 105.



SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU

(A constituent College of Siddhartha Academy of Higher Education, Tumakuru)



**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**SCHEME OF TEACHING AND EXAMINATION FOR B.E. DEGREE COURSE**  
**(Effective from the academic year 2020-21)**  
**Academic Year 2022-23**

VI Semester B.E. Information Science and Engineering (Subjects and Syllabus as per AICTE-Model Curriculum for UG Course in Engg. & Tech.- Jan. 2018)							Teaching Hrs/Week		Examination			
Sl No.	Course and Course Code		Course Title	Teaching Department	Board of Exam	Credits	L	P	CIE	SEE	Total Marks	Exam Hrs
01	PC	IS6TH1	Web Technologies	ISE	ISE	3	3	-	50	50	100	3
02	PC	IS6TH2	Software Engineering and Software Testing	ISE	ISE	3	3	-	50	50	100	3
03	PC	IS6TH3	Machine Learning Techniques	ISE	ISE	3	3	-	50	50	100	3
04	PE	IS6PE4x	Professional Elective-II	ISE	ISE	3	3	-	50	50	100	3
05	OE	IS6OE5x	Open Elective-II	ISE	ISE	3	3	-	50	50	100	3
06	PC	IS6MP2	Mini Project-II	ISE	ISE	3	-	3	50	50	100	3
07	PC	IS6LB1	Web Technology Laboratory	ISE	ISE	1.5	-	3	50	50	100	3
08	PC	IS6LB2	Machine Learning Laboratory	ISE	ISE	1.5	-	3	50	50	100	3
09	HS	SK6DP4	Skill Development-IV	HS	HS	1	-	2	50	-	50	-
<b>Total</b>						<b>22</b>	<b>15</b>	<b>11</b>	<b>450</b>	<b>450</b>	<b>850</b>	<b>-</b>

**L-Lecture Hours, P-Practical Hours, CIE-Continuous Internal Evaluation, SEE-Semester End Examination**

**Note:**

There is no SEE for Skill Development-III course. However, all the students should maintain a minimum 85% of attendance and 40% of CIE to get pass in the subject.

Professional Elective-II	Open Elective-II
IS6PE41: Information Storage and Management	IS6OE51: Artificial Intelligence
IS6PE42: Artificial Neural Networks	IS6OE52: Software Testing
IS6PE43: Data Science and Analytics	IS6OE53: Human Computer Interaction

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