

Name of the Institute: Symbiosis Institute of Technology

Name of the Programme: M.Tech (Geoinformatics & Surveying Technology)

Revision of Syllabus

Institute Code	Institute Name	Programme Code	Program Name	Catalog Course Code	Catalog Course Name	Course Type	Batch 2020	Batch 2021	Change in T-Code Yes / No	Change in course/Nature	Change in Pedagogy	Change in evaluation	Change in instruction method	Add on course	Changes Yes: Revised No: Not Revised
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	F7024	Smart Mapping	Core	Base PS	Dropped	Yes						Yes
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	F7025	Research Paper Writing	Core	Base PS	No Change	No						No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	F7041	F7041	Core		Added	Yes					Yes	Yes
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	GEN004	Dissertation	Core	Base PS	No Change	No						No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	GEN005	Non Catalog Courses	Core	Base PS	Dropped	Yes						Yes
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T0100	Research Publication	Core	Base PS	No Change	No						No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T4005	Integrated Disaster Management	Core	Base PS	No Change	No						No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7029	Digital Photogrammetry	Core	Base PS	No Change	No						No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7031	Fundamentals of Geographic Information Systems	Core	Base PS	No Change	No						No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7032	Fundamentals of Geographic Information Systems Lab	Core	Base PS	No Change	No						No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7033	Fundamentals of Remote Sensing	Core	Base PS	No Change	No						No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7034	Fundamentals of Remote Sensing Lab	Core	Base PS	No Change	No						No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7037	Geoinformatics Applications in Human Settlement	Elective	Base PS	No Change	No						No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7039	Geoinformatics Applications in Natural Resource Management	Elective	Base PS	No Change	No						No

701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7041	Global Navigation Satellite System	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7042	Global Navigation Satellite System Lab	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7045	Land Surveying	Elective	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7049	Spatial Data Base Management	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7050	Spatial Data Base Management Lab	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7051	Spatial Modeling & Analysis	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7052	Spatial Modeling & Analysis Lab	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7053	Surveying & Cartography	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7057	Advanced Databases	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7081	Web GIS and Application Design	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7082	Web GIS and Application Design Lab	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7092	Digital Image Processing in GIS	Core	Base PS	Dropped	Yes								Yes
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7094	Digital Image Processing Lab	Core	Base PS	Dropped	Yes								Yes
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7174	Applied Statistics	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7187	GIS for Health Care Management	Elective	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7370	Research Methodology in GIS	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	T7674	Cyber Security	Core	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	TE7150	Geospatial Application in Agriculture	Elective	Base PS	No Change	No								No
701	SIT, Pune	70146	M.Tech. (Geoinformatics and Surveying Technology)	TE7156	Digital Photogrammetry Lab	Core	Base PS	No Change	No								No



SYMBIOSIS INSTITUTE OF GEOINFORMATICS

Symbiosis International (Deemed University)

(Established under section 3 of the UGC Act, 1956 vide notification No. F.9-12/2001-U3 Govt. of India)

Re-accredited by NAAC with 'A' grade

Founder : Prof. Dr. S. B. Mujumdar, M. Sc., Ph. D. (Awarded Padma Bhushan and Padma Shri by President of India)

Percentage of Programmes where syllabus revision was carried out from AY 2021-2023

Name of the Institute: Symbiosis Institute of Technology

Name of the Programme: M.Tech (Geoinformatics & Surveying Technology)

Academic Year	Particulars	Page Numbers
2021-2022	Revision Letter	5-6
2020-2021	Revision Letter	7
	Circular of CBCS	8
2021-2022	Approved programme structure	9-14
2020-2021	Approved programme structure	15-19



Gauri Deshpande <gauri.deshpande@sig.ac.in>

Fwd: Revised Programme Structure of M.Tech (G&ST) batch 2020-22

1 message

Dr. Vidya Patkar <deputydirector@sig.ac.in>
To: Gauri Deshpande <gauri.deshpande@sig.ac.in>

Thu, Feb 9, 2023 at 10:20 AM

----- Forwarded message -----

From: **DyDirector Academics** <dydirectoracademics@sitpune.edu.in>
Date: Thu, Feb 9, 2023 at 10:22 AM
Subject: Fwd: Revised Programme Structure of M.Tech (G&ST) batch 2020-22
To: Dr. Vidya Patkar <deputydirector@sig.ac.in>

----- Forwarded message -----

From: **Dr K Kotecha** <director@sitpune.edu.in>
Date: Thu, Feb 9, 2023 at 10:19 AM
Subject: Fwd: Revised Programme Structure of M.Tech (G&ST) batch 2020-22
To: DyDirector Academics <dydirectoracademics@sitpune.edu.in>

----- Forwarded message -----

From: **Dr. Pravin Dange** <head_academics@siu.edu.in>
Date: Sat, May 22, 2021 at 5:56 PM
Subject: Revised Programme Structure of M.Tech (G&ST) batch 2020-22
To: Tejinder Paul Singh <director@sitpune.edu.in>, Dr.T.P Singh <director@sig.ac.in>
Cc: Dr. Vipin Joshi <ar_academics@siu.edu.in>, coe siu <coe@siu.edu.in>

Dear Sir/Madam,

The programme structure of Master of Technology (Geoinformatics and Surveying Technology) batch 2020-22 has been revised in the Eduwiz system.

The revision details are as follows:

Name of the Constituent: SIT**1. Programme Name-Master of Technology (Geoinformatics and Surveying Technology)**

Revision No - 03

Revision in Semester - 3

You are requested to download the latest approved program structure from the system.

If you have any queries, please feel free to contact me.

Regards

--

Dr. Pravin Dange

Head-Academics

Symbiosis International (Deemed University)

Lavale, Pune 412115, Maharashtra, India

Phone: +91-20-3911 6211 (Direct)

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K Kotecha, PhD(IIT Bombay)
Director, Symbiosis Institute of Technology (sitpune.edu.in)
Dean, Faculty of Engineering (siu.edu.in)
Head, Symbiosis Centre for Applied Artificial Intelligence(scaai.edu.in)
Symbiosis International (Deemed University), Pune 412115
Maharashtra, India



SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)

(Established under section 3 of the UGC Act 1956)

Re - accredited by NAAC with 'A' Grade

Founder: Prof. Dr. S. B. Mujumdar, MSc, Ph.D. (Awarded Padma Bhushan and Padma Shri by President of India)

SIU/U-110(SIT, Pune)/2021/74

Date: 07/01/2021

To
The Director
Symbiosis Institute of Technology, Pune

Subject: Revised Programme Structure.

Dear Sir/Madam,

Reference to SIU letter no SIU/U-110(SIT, Pune)/2020/2459 (A) dated 31/07/2021 regarding approval of programme structure of batch 2020-2021. The details of the revision are as follows:

Academic Year : 2020-2021

Sr.No.	Programme	Batch
1	Master of Technology (Geoinformatics and Surveying)	2020-2021

The revised programme structure supersedes the previously approved programme structures referred in the above letters.

<http://eduwiz.intechsolutionspune.in/eduwiz/login.html>

Path: Academics->Catalogue->Programme Structure-> View Course Structure -> Select Institute -> Select Academic Year -> Select Programme -> Select Batch -> Select Revision-> Show Course Structure -> Print Programme Structure.

Thanking you.

Sincerely,

Dr. Pravin Dange
Head- Academics

Copy to: Controller of Examinations, SIU



SYMBIOSIS INTERNATIONAL UNIVERSITY

(Established under section 3 of the UGC Act 1956 vide notification No. F.9-12/2001-U.3 of the Govt of India)

Accredited by NAAC with 'A' Grade

FOUNDER : PROF. DR. S. B. MUJUMDAR M.Sc. Ph.D.

(Awarded Padma Bhushan by President of India)

Notification No.SIU/28/565 dated 13 July 2015

Sub: Implementation of Choice Base Credit System from Academic year 2015-16

It is hereby notified for the information of all the concerned that as proposed by University Grant Commission vide letter D.O.No. F.1-1 (Secy) dated 12th November 2014, the Board of Management of Symbiosis International University in its meeting held on 25th February 2015 vide resolution no. A 15 has resolved to adopt the Choice Base Credit System (CBCS) to all programmes offered by Symbiosis International University in its Constituents / Departments from the academic year 2015- 16.

As per CBCS, grade point will be allotted to each letter grade on a 10 point grade scale with grades denoted by letters O, A+, A, B+, B, C, P, F and AB.

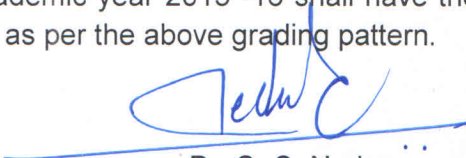
Letter Grade	Proportion	Grade Point
O (Outstanding)	Top 3%	10
A+ (Excellent)	12%	9
A (Very Good)	21%	8
B+ (Good)	28%	7
B (Above Average)	21%	6
C (Average)	12%	5
P (Pass)	Bottom 3%	4
F (Fail)		0
AB (Absent)		0

Standard of Passing: A student has to pass both Internal and External Examination separately i.e. obtain minimum Grade Point of 4.00. A Grade Point less than 4.00 will be treated as Grade 'F'.

The Programme structure of all the programmes of academic year 2015 -16 shall have the assessment, standard of passing and award of degree as per the above grading pattern.

SIU/28/15/ 3508

Dated: 13 July 2015


Dr. S. C. Nerkar
Registrar

Copy for information to:-

Hon'ble Chancellor, Vice Chancellor, Principal Director, Symbiosis Society, Sr. Advisor to Vice Chancellor, Directors of Constituents and Departments of SIU, Officers of Symbiosis International University, Officers of Symbiosis Society.



Symbiosis Institute of Technology, Pune
Master of Technology (Geoinformatics and Surveying Technology)
Programme Structure 2021-23

1.	OBJECTIVE	To generate competent manpower in the emerging areas of Geoinformatics and Surveying Technology. To inculcate among the students an aptitude for engineering and research for the furthering of knowledge in the chosen field.			
2.	DURATION (IN MONTHS)	24 (Full Time)			
3.	INTAKE	18			
4.	RESERVATION	I. Within the sanctioned intake	a) SC (In Percentage)	b) ST (In Percentage)	c) Differently abled (In Percentage)
			15	7.5	3
		II. Over and above the sanctioned intake	a) Kashmiri Migrants (In Seats)	b) International Students (In Percentage)	
				2	15
5.	ELIGIBILITY	Engineering Graduate (BE/B.Tech), M.Sc. Geoinformatics, M.Sc. Physics, M.Sc. Geology, M.Sc. Environmental Science, M.Sc. Mathematics, M.Sc. Agriculture or equivalent from any recognized University/Institution of National Importance with a minimum of 50% marks or equivalent grade (45% Marks or equivalent grade for Scheduled Caste/Scheduled Tribes).			
6.	SELECTION PROCEDURE	GATE score or Entrance Test for non-GATE candidates			
7.	MEDIUM OF INSTRUCTION	English			
8.	PROGRAMME PATTERN	Semester			
9.	COURSE & SPECIALIZATION	As per Annexure A			
10.	FEE		Academic Fee p.a	Institute Deposit	Total
		Indian Students	260000	20000	280000
		International Students (USD equivalent to INR)	390000	20000	410000
11.	ASSESSMENT	All internal courses will have 100% component as internal evaluation at the institute level. All external courses will have 60% internal component and 40% component as external [University] examination.			
12.	STANDARD OF PASSING	The assessment of students for each examination is done, based on relative performance. Maximum Grade Point (GP) is 10 corresponding to O (Outstanding). For all courses, a student is required to pass both internal and external examination separately with a minimum Grade Point of 4 corresponding to Grade P. Students securing less than 40% absolute marks in each head of passing will be			

		declared FAIL. The University awards a degree to the student who has achieved a minimum CGPA of 4 out of maximum of 10CGPA for the programme.					
13.	AWARD OF DEGREE/ DIPLOMA/ CERTIFICATE	Master of Technology (Geoinformatics and Surveying Technology) will be awarded at the end of semester IV examination by taking into consideration the performance of all semester examinations after obtaining minimum 4.00 CGPA out of 10 CGPA.					
14.	CLASSIFICATION OF CREDITS						
Semester	Generic Core	Generic Elective	Specialization Core	Specialization Elective	Open Elective	Audit	Total
1	24	0	0	0	0	1*	24
2	24	4	0	0	0	1*	28
3	14	0	0	0	0	1*	14
4	14	0	0	0	0	0	14
Total	76	4	0	0	0	0	80
* Satisfactory completion of the non letter grade courses 'Integrated Disaster Management', 'Research Publication' 'Certificate in COVID-19 Care for the Community' is mandatory for award of degree.							
The revised programme structure supersedes the previously approved programme structure dated 12/03/2022 for the programme.							

This Programme Structure is aligned with the norms laid down by the University and is approved by the Academic Council. Hereafter changes (if any) which conform to the policy on "Curriculum Development and Review" would be permissible, subject to revision of the Programme Structure, following the specified processes.

Head - Academics

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Symbiosis Institute of Technology, Pune
Master of Technology (Geoinformatics and Surveying Technology)
Programme Structure 2021-23

Celebrating 50 Years of Excellence

Annexure A

Catalog Course Code	Course Code	Course Title	Nature	Teaching Scheme			Practical		Examination Scheme Marks		Total Credits	Total
				L	T	Lab	CA	ESE	CA	ESE		
Semester : 1												
Generic Core Courses												
T7174	0701460101	Applied Statistics	MC	3	0	0	0	0	90	60	3	150
T7033	0701460102	Fundamentals of Remote Sensing	MC	3	0	0	0	0	90	60	3	150
TE7475	0701460103	Python for Geospatial Technology	MC	3	0	0	0	0	90	60	3	150
T7029	0701460104	Digital Photogrammetry	MC	2	0	0	0	0	100	0	2	100
T7031	0701460105	Fundamentals of Geographic Information Systems	MC	2	0	0	0	0	60	40	2	100
T7041	0701460106	Global Navigation Satellite System	MC	2	0	0	0	0	60	40	2	100
T7370	0701460107	Research Methodology in GIS	MC	2	0	0	0	0	60	40	2	100
T7053	0701460108	Surveying & Cartography	MC	2	0	0	0	0	60	40	2	100
TE7156	0701460109	Digital Photogrammetry Lab	MC	0	0	2	100	0	0	0	2	100
T7032	0701460110	Fundamentals of Geographic Information Systems Lab	MC	0	0	1	50	0	0	0	1	50
T7034	0701460111	Fundamentals of Remote Sensing Lab	MC	0	0	1	50	0	0	0	1	50
T7042	0701460112	Global Navigation Satellite System Lab	MC	0	0	1	50	0	0	0	1	50
TH4272	0701460113	Certificate in COVID-19 Care for the Community *		0	0	0	0	0	0	0	Non Letter Grade	0
Total				19	0	5	250	0	610	340	24	1200
Semester : 2												
Generic Core Courses												
T7057	0701460201	Advanced Databases	MC	3	0	0	0	0	90	60	3	150
T7051	0701460202	Spatial Modeling & Analysis	MC	3	0	0	0	0	90	60	3	150
TE7440	0701460203	Advance Python Programming for Spatial Analytics	MC	3	0	0	0	0	90	60	3	150
TE7528	0701460204	Digital Image Processing In RS	MC	3	0	0	0	0	90	60	3	150
T7049	0701460205	Spatial Data Base Management	MC	2	0	0	0	0	60	40	2	100
T7081	0701460206	Web GIS and Application Design	MC	2	0	0	0	0	60	40	2	100
T7674	0701460207	Cyber Security	MC	2	0	0	0	0	100	0	2	100
F7041	0701460208	Citizen Science and Geospatial Technology	MC	2	0	0	0	0	100	0	2	100
T7050	0701460209	Spatial Data Base Management Lab	MC	0	0	1	50	0	0	0	1	50



Symbiosis Institute of Technology, Pune
Master of Technology (Geoinformatics and Surveying Technology)
Programme Structure 2021-23

Annexure A

Catalog Course Code	Course Code	Course Title	Nature	Teaching Scheme			Practical		Examination Scheme Marks		Total Credits	Total
				L	T	Lab	CA	ESE	CA	ESE		
T7052	0701460210	Spatial Modeling & Analysis	MC	0	0	1	50	0	0	0	1	50
T7082	0701460211	Web GIS and Application Design Lab	MC	0	0	1	50	0	0	0	1	50
TE7661	0701460212	Digital Image Processing In RS Lab	MC	0	0	1	50	0	0	0	1	50
T4005	0701460213	Integrated Disaster Management *		0	0	0	0	0	0	0	Non Letter Grade	0
Total				20	0	4	200	0	680	320	24	1200
Generic Elective Courses Group-I												
T7039	0701460214	Geoinformatics Applications in Natural Resource Management	PE	2	0	0	0	0	100	0	2	100
T7037	0701460215	Geoinformatics Applications in Human Settlement	PE	2	0	0	0	0	100	0	2	100
T7045	0701460216	Land Surveying	PE	2	0	0	0	0	100	0	2	100
Total Required Credits							0	0	100	0	2	100
Generic Elective Courses Group-II												
T7187	0701460217	GIS for Health Care Management	PE	2	0	0	0	0	100	0	2	100
TE7150	0701460218	Geospatial Application in Agriculture	PE	2	0	0	0	0	100	0	2	100
TE7158	0701460219	Geoinformatics applications in Facility and Utility management	PE	2	0	0	0	0	100	0	2	100
Total Required Credits							0	0	100	0	2	100
Semester : 3												
Generic Core Courses												
TE7710	0701460301	Dissertation Phase 1	PIS	0	0	10	0	0	300	200	10	500
T3509	0701460302	Artificial Intelligence	PC	3	0	0	0	0	150	0	3	150
F7025	0701460303	Research Paper Writing	PC	1	0	0	0	0	50	0	1	50
T0100	0701460304	Research Publication *		0	0	0	0	0	0	0	Non Letter Grade	0
Total				4	0	10	0	0	500	200	14	700
Semester : 4												
Generic Core Courses												
TE7714	0701460401	Dissertation Phase 2	PIS	0	0	14	0	0	420	280	14	700
Total				0	0	14	0	0	420	280	14	700



Celebrating 50 Years of Excellence

Symbiosis Institute of Technology, Pune
Master of Technology (Geoinformatics and Surveying Technology)
Programme Structure 2021-23

Annexure A

Abbreviations (Nature)

BS	Basic Sciences
ES	Engineering Sciences
HS	Humanities and Social Sciences
OE	Open Electives
PC	Professional Core
PE	Professional Elective
PIS	Project, Internship, Seminar
PD	Professional Development Course
MC	Mandatory Course
L	Lecture
T	Tutorial
CA	Continuous Assessment
ESE	End Semester Examination



Symbiosis Institute of Technology, Pune
Master of Technology (Geoinformatics and Surveying Technology)
Programme Structure 2021-23

Semester	Internal Credits	External Credits	Total Credits	Total Marks
Semester 1	7	17	24	1200
Semester 2	12	16	28	1400
Semester 3	4	10	14	700
Semester 4	0	14	14	700
Total	23	57	80	4000



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Master of Technology (Geoinformatics and Surveying Technology)
Programme Structure 2020-22

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2.	DURATION (IN MONTHS)	24 (Full Time)			
3.	INTAKE	18			
4.	RESERVATION	I. Within the sanctioned intake	a) SC (In Percentage)	b) ST (In Percentage)	c) Differently abled (In Percentage)
			15	7.5	3
		II. Over and above the sanctioned intake	a) Kashmiri Migrants (In Seats)	b) International Students (In Percentage)	
				2	15
5.	ELIGIBILITY	Engineering Graduate (BE/B. Tech), M.Sc. Geoinformatics, M.Sc. Physics, M.Sc. Geology, M.Sc. Environmental Science, M.Sc. Mathematics, M.Sc. Agriculture or equivalent from any recognized University/ Institution of National Importance with a minimum of 50% marks or equivalent grade (45% or equivalent grade for Scheduled Castes/ Scheduled Tribes)			
6.	SELECTION PROCEDURE	GATE score or Entrance Test for non-GATE candidates			
7.	MEDIUM OF INSTRUCTION	English			
8.	PROGRAMME PATTERN	Semester			
9.	COURSE & SPECIALIZATION	As per Annexure A			
10.	FEE		Academic Fee p.a	Institute Deposit	Total
		Indian Students	260000	20000	280000
		International Students (USD equivalent to INR)	390000	20000	410000
11.	ASSESSMENT	All internal courses will have 100% component as internal evaluation at the institute level. All external courses will have 60% internal component and 40% component as external [University] examination.			
12.	STANDARD OF PASSING	The assessment of students for each examination is done, based on relative performance. Maximum Grade Point (GP) is 10 corresponding to O (Outstanding). For all courses, a student is required to pass both internal and external examination separately with a minimum Grade Point of 4 corresponding to Grade P. Students securing less than 40% absolute marks in each head of passing will be			

		declared FAIL. The University awards a degree to the student who has achieved a minimum CGPA of 4 out of maximum of 10CGPA for the programme.					
13.	AWARD OF DEGREE/ DIPLOMA/ CERTIFICATE	Master of Technology (Geo-informatics and Surveying Technology) will be awarded at the end of semester IV examination by taking into consideration the performance of all semester examinations after obtaining minimum 4.00 CGPA out of 10 CGPA.					
14.	NATURE WISE DISTRIBUTION OF CREDITS						
Semester	Generic Core	Generic Elective	Specialization Core	Specialization Elective	Open Elective	Audit	Total
1	21	0	0	0	0	0	21
2	27	4	0	0	0	1*	31
3	14	0	0	0	0	1*	14
4	14	0	0	0	0	0	14
Total	76	4	0	0	0	0	80
* Satisfactory completion of the non letter grade courses 'Integrated Disaster Management' and 'Research Publication' is mandatory for award of degree.							
The revised programme structure supersedes the previously approved programme structure dated 07/01/2021 for the programme.							



Symbiosis Institute of Technology, Pune
Master of Technology (Geoinformatics and Surveying Technology)
Programme Structure 2020-22

Annexure A

Catalog Course Code	Course Code	Course Title	Nature	Teaching Scheme			Practical		Examination Scheme Marks		Total Credits	Total
				L	T	Lab	CA	ESE	CA	ESE		
Semester : 1												
Generic Core Courses												
T7174	0701460101	Applied Statistics	MC	45	0	0	0	0	90	60	3	150
T7033	0701460102	Fundamentals of Remote Sensing	MC	45	0	0	0	0	90	60	3	150
TE7475	0701460103	Python for Geospatial Technology	MC	45	0	0	0	0	90	60	3	150
T7029	0701460104	Digital Photogrammetry	MC	30	0	0	0	0	100	0	2	100
T7031	0701460105	Fundamentals of Geographic Information Systems	MC	30	0	0	0	0	60	40	2	100
T7041	0701460106	Global Navigation Satellite System	MC	30	0	0	0	0	60	40	2	100
T7370	0701460107	Research Methodology in GIS	MC	30	0	0	0	0	60	40	2	100
T7053	0701460108	Surveying & Cartography	MC	30	0	0	0	0	60	40	2	100
T7674	0701460109	Cyber Security	MC	0	0	60	0	0	100	0	2	100
Total				285	0	60	0	0	710	340	21	1050
Semester : 2												
Generic Core Courses												
T7057	0701460201	Advanced Databases	MC	45	0	0	0	0	90	60	3	150
T7092	0701460202	Digital Image Processing in GIS	MC	45	0	0	0	0	90	60	3	150
T7051	0701460203	Spatial Modeling & Analysis	MC	45	0	0	0	0	90	60	3	150
TE7440	0701460204	Advance Python Programming for Spatial Analytics	MC	45	0	0	0	0	90	60	3	150
T7049	0701460205	Spatial Data Base Management	MC	30	0	0	0	0	60	40	2	100
T7081	0701460206	Web GIS and Application Design	MC	30	0	0	0	0	60	40	2	100
TE7156	0701460207	Digital Photogrammetry Lab	MC	0	0	60	100	0	0	0	2	100
F7024	0701460208	Smart Mapping	MC	30	0	0	0	0	100	0	2	100
T7094	0701460209	Digital Image Processing Lab	MC	0	0	30	50	0	0	0	1	50
T7050	0701460210	Spatial Data Base Management Lab	MC	0	0	30	50	0	0	0	1	50
T7052	0701460211	Spatial Modeling & Analysis Lab	MC	0	0	30	50	0	0	0	1	50
T7082	0701460212	Web GIS and Application Design Lab	MC	0	0	30	50	0	0	0	1	50
T7032	0701460220	Fundamentals of Geographic Information Systems Lab	MC	0	0	30	50	0	0	0	1	50
T7034	0701460221	Fundamentals of Remote Sensing Lab	MC	0	0	30	50	0	0	0	1	50



Symbiosis Institute of Technology, Pune
Master of Technology (Geoinformatics and Surveying Technology)
Programme Structure 2020-22

Celebrating 50 Years of Excellence

Annexure A

Catalog Course Code	Course Code	Course Title	Nature	Teaching Scheme			Practical		Examination Scheme Marks		Total Credits	Total
				L	T	Lab	CA	ESE	CA	ESE		
T7042	0701460222	Global Navigation Satellite System Lab	MC	0	0	30	50	0	0	0	1	50
T4005	0701460213	Integrated Disaster Management *		0	0	0	0	0	0	0	Non Letter Grade	0
Total				270	0	270	450	0	580	320	27	1350
Generic Elective Courses Group												
T7039	0701460214	Geoinformatics Applications in Natural Resource Management	PE	30	0	0	0	0	100	0	2	100
T7037	0701460215	Geoinformatics Applications in Human Settlement	PE	30	0	0	0	0	100	0	2	100
T7045	0701460216	Land Surveying	PE	30	0	0	0	0	100	0	2	100
Total Required Credits							0	0	100	0	2	100
Generic Elective Courses Group												
T7187	0701460217	GIS for Health Care Management	PE	30	0	0	0	0	100	0	2	100
TE7150	0701460218	Geospatial Application in Agriculture	PE	30	0	0	0	0	100	0	2	100
TE7158	0701460219	Geoinformatics applications in Facility and Utility management	PE	30	0	0	0	0	100	0	2	100
Total Required Credits							0	0	100	0	2	100
Semester : 3												
Generic Core Courses												
TE7710	0701460301	Dissertation Phase 1	PIS	0	0	300	0	0	300	200	10	500
TE7245	0701460302	Artificial Intelligence	PC	45	0	0	0	0	150	0	3	150
T0100	0701460303	Research Publication *		0	0	0	0	0	0	0	Non Letter Grade	0
F7025	0701460304	Research Paper Writing	PC	15	0	0	0	0	50	0	1	50
Total				60	0	300	0	0	500	200	14	700
Semester : 4												
Generic Core Courses												
TE7714	0701460401	Dissertation Phase 2	PIS	0	0	840	0	0	420	280	14	700
Total				0	0	840	0	0	420	280	14	700



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Master of Technology (Geoinformatics and Surveying Technology)
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Semester	Internal Credits	External Credits	Total Credits	Total Marks
Semester 1	4	17	21	1050
Semester 2	15	16	31	1550
Semester 3	4	10	14	700
Semester 4	0	14	14	700
Total	23	57	80	4000