Department of Civil Engineering



Annual Report 2017-18

15303

SWAMI VIVEKANANDA INSTITUTE OF SCIENCE & TEHCNOLOGY, SONARPUR

PREAMBLE

The Department of *Civil Engineering* of **Swami Vivekananda Institute of Science & Technology, Sonarpur** has started its glorious journey in the year 2014. The newly built department has the exposure in focusing the students' need in imparting excellence and need based technical education for building up prospective career of the students.

The department has the mission to build up the students' need with beautiful ambience, highly qualified faculty, a modern high-tech laboratory, well stocked books on Civil Engineering subjects in the library.

On this year remarkable interest in higher studies, attending the conferences and seminars, paper publications etc. have been observed among the faculty members.

One day Seminar on introduction of "STAAD Pro" by Bentley System and one day invited lecture on "Civil Engineering and its applications" have become a grand success with active participation of faculty, students, staff and members of college. Action has been initiated for commissioning of Environment Engineering Laboratory and CAD Laboratory.

Availability of faculty in context to related subjects is always scarce; however, one new faculty has already joined and further action has already been initiated to recruit faculties as needed.

In modernization programme, two new laboratories have been developed consisting of instruments, like Total Station, to conduct Survey Practical Training to the students Soil Mechanics Laboratory and Geology Laboratory. Department also acquired modern.

On this year, a noticeable improvement in students' attendance is observed. Many students of 2nd year and 3rd year have achieved more than 90% attendance. Students' performance in semester examinations is also on the higher side.

Expecting better achievements during the ensuing years to come.

1.0	NAN	ME OF THE DEPARTMENT :	CIVIL ENGINEERING
2.0	YEA	R OF STARTING OF THE PROGRA	MME: 2014
3.0	AIC	TE APPROVAL DETAILS OF THE D	EPARTMENT:
nun	(a) ber	Date of first approval by	AICTE with referen
		(for 60 seats)	
	•	Refdate	
		160	
	(b)	Date of approval by AICTE :	for current academic
	•	Ref dated	
			1
	(c)	Approval by West Ber	ngal University of
		reference number	academic year with
	•	Ref dated	
4.0	PRO	OGRAMME DETAILS: B-Tec	ch In Civil Engineering
	(a)	Nature of Programme:	Full tíme
	(b)	Duration:	4 years
	(c)	Sanction Intake:	60

B. Tech (2017-18)	1 st Year	2 nd Year	3 rd Year	4 th Year	7
No of students	22	71	72	68	

Lateral entry – 10% in 3rd Semester

5.0 COURSE STRUCTURE:

(As per Affiliating University):

List of Subjects

Sl.	Subject Code	Subject								
110.	Т	Third Semester:								
1	HU301	Values & Ethics in Profession								
2	PH301	Physics - 2								
3	CH301	Basic Environmental Engineering & Elementary Biology								
4	CE301	Solid Mechanics								
5	CE302	Surveying								
6	CE303	Building Material & Construction								
7	PH391	Physics - 2								
8	CE391	Solid Mechanics								
9	CE392	Surveying Practice I								
10	CE393	Building Design & Drawing								
	F	ourth Semester:								
11	M(CS)401	Numerical Methods								
12	M402	Mathematics - 3								
13	CE401	Fluid Mechanics								
14	CE402	Structural Analysis								
15	CE403	Soil Mechanics								
16	HU481	Technical Report Writing & Language Lab Practice								

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17	M(CS)491	Numerical Methods	~						
18	CE491	Fluid Mechanics							
19	CE492	Surveying Practice -II							
20	CE493	Soil Mechanics Lab - I							
	F	Fifth Semester:							
21	HU501	Economics for Engineers							
22	CE501	Foundation Engineering							
23	CE502	Design of RC Structures							
24	CE503	Concrete Technology							
25	CE504	Engineering Geology							
26	CE 591	Soil Mechanics Lab – II							
27	CE592	Concrete Laboratory							
28	CE593	Quantity Surveying, Specifications							
20	CE393	and Valuation							
29	CE594	Engineering Geology Laboratory							
		Sixth Semester							
30	HU601	Principles of Management							
31	CE601	Highway & Transportation							
51	CLOOI	Engineering	_						
32	CE602	Design of Steel Structure	-						
33	CE603	Construction Planning and							
55	CLOUS	Management							
34	CE604	Professional Elective – I	-						
35	CE605	Free Elective – I	_						
36	CE691	Highway & Transportation Engg Lab	-						
37	CE692	Detailing of RC and Steel Structures	_						
38	CE693	CAD Laboratory	-						
39	CE681	Seminar	-						
	Se	eventh Semester	-						
40	CE701	Environmental Engineering	-						
41	CE702	Water Resource Engineering	-						
42	CE703	Professional Elective II							
43	CE704	Professional Elective III	-						
44	CE705	Free Elective II							
45	HU781	Group Discussion							
46	CE791	Environmental Engg Lab							
47	CE792	Civil Engineering Practice Sessional							

48	CE793	Free Elective Laboratory	
49	CE782	Industrial Training	
50	CE783	Project Part I	
	I	Eighth Semester	
51	HU801A/	Organizational Behavior / Project	
51	HU801B	Management	
52	CE801	Professional Elective IV	
53	CE802	Professional Elective V	
51	CE901	Structural Engineering Design	
54	CE091	Practice	
55	CE881	Project Part II	
56	CE 882	Grand – Viva	

6.0 COURSE STRUCTURE:

List of Subjects

Third Semester:

	Theory		C per	onta riods wee	acts s per k		all I	>		Marks		
Code	Subject	L	Т	P	Total	Point	UT1 /UT 2	Assi gnm ent	Attendence	Total Internal	Total External	TOTAL
HU301	Values & Ethics in Profession	3	0	0	3	3	15	10	CC055-20	30	70	100
PH301	Physics - 2	3	1	0	4	4	15	10	5	30	70	100
CH301	Basic Environmenta I Engineering & Elementary Biology	(2 + 1)	0	0	3	3	15	15 10 5		30	70	100
CE301	Solid Mechanics	3	0	0	3	3	15	10	5	30	70	100
CE302	Surveying	3	1	0	4	4	15	10	5	30	70	100
CE303	Building Material & Construction	3	1	0	4	4	15	10	5	30	70	100
T	otal Theory				21	21						
	Practical		nta pe	cts p er we	beriods ek	~				Marks		
Code Subject		L	L T P Total Credi		Credit Point	Т	otal In	ternal	Total Ex	ternal	TOTAL	
PH391	Physics - 2	0	0	3	3	2		40		60		100

CE391	Solid Mechanics	0	0	3	3	2	40	60	100
CE392	Surveying Practice I	0	0	3	3	2	40	60	100
CE393	Building Design & Drawing	0	0	3	3	2	40	60	100
Tota	al Practical				12	8			
Tota	Total Semester				33	29			

List of Subjects

Fourth Semester:

	Theory	Cor	ntact v	s hou veek	urs per	-		1	Marl	IE KS		
Code	Subject	L	Т	Р	Total	Credit Point	UT1 /UT 2	Assignm ent	Attendance	Total Intern al	Total Extern al	TOTAL
M(CS) 401	Numerical Methods	2	1	0	3	2	15	10	5	30	70	100
M 402	Mathematics –	3	1	0	4	4	15	10	5	30	70	100
CE 401	Fluid Mechanics	3	0	0	3	3	15	10	5	30	70	100
CE 402	Structural Analysis	3	1	0	4	4	15	10	5 5	30	70	100
CE 403	Soil Mechanics	3	1	0	4	4	15	10	5	30	70	100
Т	otal Theory				18	17						
	Practical	Cor	ntact v	s hou veek	urs per				Marl	KS .		
Code	Subject	L	Т	Р	Total	Credit Point			Total Internal	Tota Extern	ıl nal	TOTAL
HU 481	Technical Report Writing & Language Lab Practice	0	0	3	3	2			40	60		100
M (CS) 491	Numerical Methods	0	0	2	2	1			40	60		100
CE 491	Fluid Mechanics	0	0	3	3	2			40	60		100
CE 492	Surveying Practice II	0	0	3	3	2		40		60		100

СЕ 493	Soil Mechanics Lab I	0	0	3	3	2		
То	tal Practical				14	9		
To	tal Semester				32	26		

List of Subjects

Fifth Semester:

	Theory	0	Cont pe	acts er w	s hours reek	Cradit				Ma	rks		
Code	Subject	L	Т	Р	Total	Point	UT1 / UT2	Assign ment	Attend	dance	Total Intern al	Total Externa	I TOTAL
HU 501	Economics for Engineers	3	0	0	3	3	15	10	5	5	30	70	100
CE 501	Foundation Engineering	3	1	0	4	4	15	10	5	5	30	70	100
CE 502	Design of RC Structures	3	1	0	4	4	15	10	5	2	30	70	100
CE 503	Concrete Technology	3	0	0	3	3	15	10	5	;	30	70	100
CE 504	Engineering Geology	3	0	0	3	3	15	10	5	5	30	70	100
]	Total Theory				17	17		~	10	\$			
	Practical	Contacts hours per week			s hours reek	Credit	re h	is In	Ser.				
	Subject	L	Т	Р	Total	Point	T	otal Interr	nal	To	otal Extern	nal	TOTAL
CE 591	Soil Mechanics Lab -II	0	0	3	3	2		40			60		100
CE 592	Concrete Laboratory	0	0	3	3	2		40			60		100
CE 593	Quantity Surveying, Specifications and Valuation	0	0	3	3	2		40		60			100
CE 594	Engineering Geology Laboratory	0	0	3	3	2		40			60		100
Т	Total Practical				12	8							
Т	otal Semester				29	25							

List of Subjects

Sixth Semester:

Theory	Contacts hours per week	Credit Point	Marks

Code	Subject	L	Т	Р	Total		UT1 / UT2	Assign ment	Attendance	Total Intern al	Total External	TOTAL
HU- 601	Principle of Management	2	0	0	2	2	15	10	5	30	70	100
CE 601	Highway & Transportation Engineering	3	0	0	3	3	15	10	5	30	70	100
CE 602	Design of Steel Structure	3	0	0	3	3	15	10	5	30	70	100
CE 603	Construction Planning and Management	3	0	0	3	3	15	10	5	30	70	100
CE 604	Professional Elective – I a. Bridge Engineering b. Prestressed Concrete c. Structural Dynamics and Earthquake Engineering	3	0	0	3	3	15	10	5	30	70	100
CE60 5	Free Elective - I a. Operation Research (M) b. Human Resource Management (HSS) c. Materials Handling (ME)	3	0	0	3	3	15	10	5	30	70	100
	Total Theory				17	17		1	-		<u> </u>]
	Practical	C	onta	acts	hours per	Credit	Marks					
Code	Subject	L	Т	we	P Total	Point	T	otal Intern	al To	tal Externa	al 7	OTAL
CE691	Highway & Transportation Engineering Lab	0	0		3 3	2		40		60		100
CE692	Detailing of RC and Steel Structures	0	0		3 3	2		40		60		100
CE693	CAD Laboratory	0	0		3 3	2		40		60		100
CE681	Seminar	0	0		3 3	2		40		60		100
]	Total Practical				12	8						
Ţ	Total Semester				29	25						

List of Subjects

Seventh Semester:

Theory	Contacts hours	Credit	NONE
	per week	Point	Marks

	·						_					
Code	Subject	L	Т	Р	Total		UT1 / UT2	Assi gnm ent	Attendance	Total Internal	Total External	TOTAL
CE- 701	Environmental Engineering	3	0	0	3	3	15	10	5	30	70	100
CE- 702	Water Resource Engineering	3	0	0	3	3	15	10	5	30	70	100
CE- 703	Professional Elective-II a. Advanced Foundation Engineering b. Soil stabilization and Ground Improvement Techniques c. Advanced Highway and Transportation engineering	3	0	0	3	3	15	10	5	30	70	100
CE- 704	Professional Elective-III a. Advanced Structural Analysis b. Hydraulic Structures	3	0	0	3	3	15	10	5	30	70	100
CE- 705	Free Elective-II a. Engineering Materials b. Electrical and	3	0	0	3	3	15	10	5	30	70	100
	Electronic Measurement			1			N	100				
-	Total Theory				15	15			1			
	Practical	0	Cont pe	acts er we	hours eek	Credit Point	1	-		Marks		
Cod e	Subject	L	Т	Р	Total	iver		Total In	ternal	Total Exte	rnal	TOTAL
HU 781	Group Discussion	0	0	3	3	2		40)	60		100
CE 791	Environmental Engineering Lab	0	0	3	3	2		40)	60		100
CE 792	Civil Engineering Practice Sessional	0	0	3	3	2		40)	60		100
CE 793	Free Elective Laboratory a. Material Testing Lab b. Electrical and Electronic Measurement Laboratory	0	0	3	3	2		40		60		100
CE 782	Industrial Training	n / a	n / a	n / a	n/a	2						100
CE7 95	Project part-I	0	0	0	6	2		40)	60		100
	Total Practical				18	12						
	Total Semester				33	27		NONE				

Eighth Semester:

List	of	Subjects	
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Т	Theory			acts h wee	ours per k	Credit Point	Marks					
Code	Subject	L	Т	Р	Total		UT 1/ UT 2	Assign ment	Attenda nce	Total Internal	Total External	TOTAL
HU-801A/ HU 801B	Organizational Behaviour / Project Management	2	0	0	2	2	15	10	5	30	70	100
	Professional Elective-IV A. Environmental Pollution and Control B. Water											
CE-801	Resource Management and Planning C. Remote Sensing and GIS	3	0	0	3	3	15	10	5	30	70	100
CE803	Professional Elective-V A. Finite Element Method B. Dynamics of Soils & Foundations C. Design of Tall Buildings D. Pavement Design	3	0	0	3 Dave	3	15	10	Sier	30	70	100
Tota	al Theory	C	onte	ate h	8	8 Cradit	100.000					
P	ractical			wee	ek	Point		Marks				
Code	Subject	L	Т	Р	Total			Total Int	ternal	Total	External	TOTAL
CE-881	Engineering Design Practice	0	0	6	6	4		40			50	100
CE-882	Project Part-II	0	0	12	12	6		40			60	100
CE-883 Grand viva		0	0	0	0	3		40			50	100
Tota	Practical				18	13	NO E	И				
Tota	l Semester				26	21	NO E	N				

FACULTY PROFILE

	Name	Qualification	Date of Birth	Designatio n	Date of joining
1	Saptarshi Nandi	B.Tech, M.E	19/10/ 1983	Assistant Professor & HOD	09/08/2 016
2	Samik Banerjee	B.Tech, M.Tech	01/03/ 1990	Assistant Professor	
3	Priyajeet Mondal	B.Tech, M.Tech	18/06/ 1991	Assistant Professor	
4	Shiladitya Mandal	B. Tech, M.E,	19/06/ 1991	Assistant Professor	
5	Saptarshi Bhunia	B. Tech, M.E,		Assistant Professor	
6	Anubhab Das	B. Tech, M.Tech	06/10/ 1992	Assistant Professor	
7	Asim Mazumder	B. Tech, M.Tech	04/08/ 1993	Assistant Professor	04/08/2 017
8	Pranab Chakraborty	B. Tech, M.Tech	S ITOSSO	Assistant Professor	
9	Dr. Anindita Kundu	B.Sc, M.Sc,Ph.D	30/03/ 1990	Assistant Professor	19/07/2 017
10	Chandra Skekher Bowmik	B. Tech, M.Tech	31/03/ 1957	Assistant Professor	

7.0 TECHNICAL STAFFS:

- **1.** Miss Moumita Ghosh
- 2. Miss Payel Dutta



8.0 **DELEGATION OF RESPONSIBILITY:**

Institutional:

- Academic Council Saptarshi Nandi (member)
- Examination Cell Dr. Anindita Kundu, Saptarshi Nandi(member)
- Routine Committee Samik Banerjee (Member)
- Disciplinary Committee Saptarshi Nandi (member)
- Anti-ragging Committee Saptarshi Nandi
- Sports committee: Moumita Ghosh(member) •

Departmental:

- Research and Development –Asim Mazumder, Dr. Anindita Kundu
- University Affairs Saptarshi Nandi
- Students' Mentorship Moumita Ghosh, Payel Dutta, Dr. Anindita Kundu
- Departmental Library Payel Dutta

9.0 STUDENTS ACTIVITY

• Two Students of Civil Engineering Department participated in Sports and music competition.

10.0 SPACE ALLOCATION

A) Laboratories

- 1. Soil Mechanics Laboratory
- 2. Solid Mechanics Laboratory
- Room No. C104, 667.8 ft²
- Room No. C104, 667.8 ft²
- 3. Concrete Laboratory
- Room No. C109, 663.4 ft² _ Room No. C103, 756 ft²
- 4. Engineering Geology Laboratory -
- 5. Highway & Transportation Engineering Laboratory-Room No. C103,

 $756 \, {\rm ft}^2$

- 6. Survey Laboratory
- Room No. C103, 756 ft²

7. Drawing Laboratory - Room No. C108, 708 ft²

8.	CAD Laboratory -						
9.	Environmental Engineering Laboratory -						
10.	Fluid Mechanics Laboratory -						
B)	Classrooms						
1	2 nd vear CE Classroom - Room No C102						
1.	$\frac{2}{667.8} \text{ ft}^2$						
	007.8 11						
2	3 rd year CE Classroom Room No C105						
2.	$\frac{1}{667.8} \text{ ft}^2$						
	007.011						
3	4 th year CE Classroom Poom No C106						
5.							
\mathbf{C}	Others 007.0 IL ⁻						
C)	omers						
1	HOD Room - Room No C101						
1.	264 ft^2						
2	Faculty Room - Room No C101						
2.	$\frac{1}{264} \text{ ft}^2$						
	204 11						
	RESOURCES:						
10.	10.1 DEPARTMENTAL LIBRARY:						

Books available – 30 nos.

10.2 LABORATORY:

SOLID MECHANICS	1. Tension test on structural materials: mild steel and tor steel (HYSD
ROOM NO. C104	Bar)
(GROUND FLOOR)	2. Compression test on structural materials: Timber, bricks and
	Concrete cubes
	3. Bending test on mild steel.
	4.Torsion test on mild steel circular bar.
	5.Hardness test on ferrous and non-ferrous metals: Brinnel and
	Rockwell test.
	6.Test on Closely coiled helical spring.
	7.Impact test: Izod and Charpy
	8.Demonstration of fatigue test.

Г	SURVEYING	1.Chain surveying
	PRACTICE - I	2.Compass surveying
	ROOM NO. C104	3.Plain table surveying
	(GROUND FLOOR)	4.Levelling
		5.Contouring
	BUILDING DESIGN	1.Foundations for walls and columns along with raft & pile
	AND DRAWING.	2. Glazed and paneled doors & windows of standard sizes as wells
	ROOM NO. C108	special windows & ventilators
	(GROUND FLOOR)	3. Details reinforcement for RCC staircase with its plan, design and elevation of different types of staircases
		4 Types of sloping roof lean-to roofs RCC roof with details of
		reinforcements, King post and Queen post trusses
		5. different types of building showing various components like lift,
		well and their sizes by using plan, elevation and section.
	FLUID MECHANICS	1.Determination of orifice co-efficient
		2.Calibration of orifice meter
		3.Calibration of V-Notch
		4. Measurement of velocity of water in an open channel using a pitot
		tube
		5.Measurement of water surface profile for flow over board crested
		weir
		6.Preparation of discharge rating curve for a sluice
		7.Measurement of water surface profile for a hydraulic jump
		8.Determination of efficiency of a centrifugal pump
		9.Determination of efficiency of a reciprocating pump
		10. Determination of efficiency of a pelton wheel turbine
		11. Determination of efficiency of a francis turbine
		12. Determination of efficiency of a hydraulic ram
	SURVEYING	1. traversing using Theodolite
	PRACTICE - II	2. traversing by using total stations
	ROOM NO. C103	3. Use total Station for levelling and Contouring
	(GROUND FLOOR)	4.Setting out simple curves.
	SOIL MECHANICS	1. Identify the different types of soil by collecting field complex as per
	JAR - I	Indian Standards along with determination of natural moisture
	ROOM NO C104	content
	(GROUND FLOOR)	2 Determination of specific gravity of Cohesionless and cohesive soil
	(uncond ridon)	2. Determination of specific gravity of concestonices and concestor som
		3. Determination of insitu density by core cutter method & sand replacement method
		4.Grain-size distribution of cohesionless soil by sieving & fine -
		grained soil by hydrometer analysis.
		5. Determination of Atterberg's limits (Liquid Limit, Plastic Limit and
		shrinkage Limit
		6. Determination of co- efficient of permeability by constant head
		parameter (coarse grained soil) & variable head parameter (fine
		grained soil)

1		
Г		7. Determination of compaction characteristics of soil.
	SOIL MECHANICS	1.Determination of characteristics of soil by Oedometer test
	LAB -II ROOM NO. C104 (GROUND FLOOR)	2. Determination of unconfined compressive strength of soil.
	(uncond rideen)	3. Determination of shear parameter of soil by direct shear test.
		4. Determination of undrained shear strength of soil by Vane shear
		test
		5. Determination of snear parameter of soil by triaxial test.
	CONCRETE	1 Determination of specific gravity of coment
	LABORATORY	2 Determination of fineness of cement
	ROOM NO. C109	3. Determination of soundness of cement.
	(GROUND FLOOR)	4. Determination of normal consistency of cement.
		5. Determination of setting time of cement.
		6. Determination of compressive strength of cement
		7. Determination of specific gravity of fine aggregates.
		8. Determination of bulking of fine aggregates
		9. Determination of sieve analysis of fine aggregates
		10. Determination of fineness modulus of fine aggregates
		11. Determination of bulk density of fine aggregates
		12. Determination of moisture content of fine aggregates
		13. Determination of specific gravity of coarse aggregates
		14. Determination of fineness modulus of coarse aggregates
		16. Determination of hulk density of coarse aggregates
		17. workability of fresh concrete by slump
		18. workability of fresh concrete by Vee-Bee
		19. workability of fresh concrete by Compacting Factor.
		20. compressive strength on Cubes
		21. split tensile strength
		22. Static modulus of elasticity of hardened concrete by Flexure tests
		23. Rebound hammer test
		24. Offrasonic Pulse velocity test
	OUANTITY	1 Identify quantity surveying by types and approximation of
	SURVEYING,	estimates, items of work & unit of measurement, unit rate of payment
	SPECIFICATIONS & VALUATION LAB	2. quantity estimate of a single storied building.
	ROOM NO. C105 (GROUND FLOOR)	3. Bar bending schedule
		4. measurement and calculation of quantities with cost, bill, abstract of quantities
		5.estimate of quantities of road, Underground reservoir, Surface drain, Septic tank.
		6.Analysis of rates of Earthwork, brick flat soling, DPC, PCC and RCC, brick work, plastering, flooring and finishing

		7 marification of materials of height compart fine and econor
ſ		7. specification of materials of brick, cement, fine and coarse
		8 specification of works of plain compart concrete reinforced compart
		o. specification of works of plain cement concrete, remotive cement
		concrete, in st class blickwork, cement plastering, pointing, white
		washing, colour washing, distempering, nine punning, panting and
		varnisning.
		9. values and cost, gross income, outgoing, net income, scrap value,
		salvage value, market value, book value, sinking fund, capitalised
		value Y P depreciation obsolescence deferred income freehold and
		leasehold property, mortgage, rent fixation, valuation table.
ľ	ENGINEERING	1. Identify the crystal systems with the help of crystal models
	GEOLOGY LAB	2. Interpret of Rocks and Minerals by hand specimens
	ROOM NO. C103	3. Experiment with microscopic study of rocks and minerals
	(GROUND FLOOR)	4. Analyse of Geological maps by interpreting geological structures as
		well as figure out the thickness problems, bore-hole problems
	HIGHWAY &	1. Determination of Impact value of aggregates
	TRANSPORTATION	2. Determination of Los-Angeles Abrasion value of aggregates.
	ENGINEERING LAB	3. Determination of water absorption of aggregates.
	ROOM NO. C103	4 Determination of Flongation & Flakiness Index of aggregates
	(GROUND FLOOR)	5 Determination of Specific gravity of Bitumen & hituminous
		materials
		6 Determination of penetration value of Bitumen & hituminous
		materials
		7. Determination of softening point of Bitumen & bituminous
		8 Determination of loss on heating of hituminous materials
		0. Determination of Flach & Fire point test of Pitumen & hituminous
		materials
		10. Determination of Stripping value test of Bitumen & bituminous
		materials
		11. design of B.C. & S.D.B.C mix
		12. CBR Test
		13. Marshal Stability Test
		14. Benkelman beam Test
	DETAILING OF RC	1. design principle of R.C.C. sections. Limit state method of design
	& STEEL	Loads and stresses to be considered in the design as per I.S. code
	STRUCTURES	provision
	ROOM NO. C108	2. design & detailing of a simply supported R.C.C Beam
	(GROUND FLOOR)	3. design & detailing of a Continuous T- Beam
		4. design & detailing of a isolated footing
		5. design & detailing of a combined footing
		6. design & detailing of a simply supported one-way slab
		7. design & detailing of a simply supported One-way Continuous slab
		8. design of Slab
		9. design of beam
		10. design of column
		11. design of roofing
L		12. design of staircase

		13. design of floor plan of a multistoried frame building
		14. design of two way floor slab
		15 problems on general consideration and basic concepts
		16. Design & drawing of Members of the roof truss
		17 Design & drawing of Joints of the roof truss members
		17. Design & drawing of Junt's of the roof truss members
		10. Design & drawing of Cable bracings
		20 Design & drawing of Column with bracings
		20. Design & drawing of Column base plate
		22. Design & drawing of Column foundations
-		1 Introduction and important features of a software dealing with
	CAD LADUKATUKI	analysis and design of structures
		2 analysis and design of a multistoried huilding using software
		2. Analysis and design of a multistoried building using software
		3. Preparation of detailed drawings of different structural elements
		A Design of DCC Clob began early and facting
-		4. Design of RCC Slab, beam, column and footing
	ENVIRONMENTAL	1. Determination of turbidity for a given sample of water
	ENGINEERING LAB	2. Determination of color for a given sample of water
		3. Determination of solids in a given sample of water: Total Solids,
		Suspended Solids and Dissolved Solids
		4. Determination of pH for a given sample of water
		5. Determination of concentration of Chlorides in a given sample of
		water
		6. Determination of carbonate, bi-carbonate and hydroxide alkalinity
		for a
		given sample of water
		7. Determination of naroness for a given sample of water
		water
		9. Determination of concentration of Iron in a given sample of water
		10 Determination of the Optimum Alum Dose for a given sample of
		water
		through lar Test
		11. Determination of the Residual Chlorine in a given sample of water
		12. Determination of the Chlorine Demand for a given sample of
		water
		13. Determination of the Available Chlorine Percentage in a given
		sample of
		bleaching powder
		14. Determination of amount of Dissolved Oxygen (DO) in a given
		sample of
		water
		15. Determination of the Biochemical Oxygen Demand (BOD) for a
		given
		sample of wastewater
		16. Determination of the Chemical Oxygen Demand (COD) for a given
		sample of wastewater
		17. Determination of bacteriological quality of water: presumptive
		test,
L		confirmative test and Determination of MPN

ľ	STRUCTURAL	1. Design of Beams curved in plan,
	ENGINEERING	2.Design of Domes
	DESIGN PRACTICE	3.Design of Circular and Intze Tanks
	(CROUND FLOOR)	4. Design of Rectangular Tanks
		5. Design of Underground Tanks
		6.Design of Reinforced concrete pipes,
		7. Design of Bunkers and Silos, Chimneys
		8.Design of Box Culverts, Concrete Bridges
		9. Design of Web, Design of flanges, Intermediate Vertical
		Stiffners, Horizontal Stiffners, Bearing Stiffners, Horizontal Stiffners
		of Plate gliders.
		10. Design of Roof and Side Coverings, Design Loads, Purlins,
		Members, End Bearings, Industrial Building Frames, Framing,
		Bracing, Crane
		Girders and Columns of Roof truses.
		11.Design of Steel Bridges

11.0 FACULTY PARTICIPATIONS:

- (a) Participation in parents department
- i) External sponsored projects
- ii)
- iii)
- Continuing education Collaboration (industrial/institutional) iv)
- **Students** Projects v)
- Students Guidance (M.Tech/PhD) vi)
- Invited lectures (National/International) vii)
- viii) Professional Society Activities
- Conferences/seminars/winter/summer schools ix)
- **Research Publications** X)
- Text Books/Monographs published xi)
- Patents/ Awards received xii)
- xiii) Any financial Assistance for projects

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12.0 FDP/ QIP/ SEMINAR/INVITED TALK ORGANIZED

12.1 One Day long Invited lecture on "*Civil Engineering and Its Applications*" on 4th August, 2017 organized by this department sponsored by SVIST.

Invited Speakers:

Mr. P.K. Acharya, Commissioner of Railway Safety Department.

12.2 One Day Seminar on introduction of "STAAD Pro" 22nd August, 2017 by.

Invited Speakers:

Bentley System

13.0 STUDENTS RESULTS:

3 rd SEMESTER					
	10.00 - 9.00	8.99 - 8.00	7.99 – 7.00	6.99 - 6.00	5.99 - 5.00
2017-18	0	8	35	46	21
	AL				





Department of Civil Engineering



Department of Civil Engineering



14.0 INDUSTRIAL TRAINING:

Civil Engineering department co-ordinates industrial Training for every student as this is compulsory according to university course curriculum.

S1.	Name of Students	Roll No	Training	Name of	
No			Period/duration	Company	
1.	1. Alqama Saleh Ahmed	24101314002	15 Days	Public	
	2. Ankush Das	24101314004	22 Days	Works	
	3. Asif Ahamed Sardar	24101314005	1 Month	Department	
	4. Souvik Mahata	24101314023	18 Days	, Govt. of	
	5. Subhadip Pramanik	24101314024	18 Days	W.B	
	6. Syed Shabbir Ali Hussain	24101314029	15 Days		
	7. Alarka Pal	24101314036	1 Month		
	8. Dibyendu Paul	24101314037	1 Month		
	9. Krishnendu Mondal	24101314038	1 Month		
	10. Saddam Hossain	24101315069	21 Days		
2.	1. Ankush Das	24101314004	15 Days	Central	
	2. Asif Ahamed Sardar	24101314005	2 Weeks	Public	
	 Debajyoti Haldar 	24101314007	22 Days	Works	
	4. Debsurya Adhikary	24101314008	15 Days	Department	
	5. Masud Reja Ali Mistry	24101314011	15 Days	, Govt. of	
	6. Mrityunjoy Sarkar	24101314012	15 Days	India 🖊	

F					
	7. Pankaj Roy	24101314014	15 Days		٦
	8. Sarthak Naskar	24101314016	2 Weeks		
	9. Sourav Ghosh	24101314021	15 Days		
	10. Souvik Mahata	24101314023	15 Days		
	11. Subhadip Pramanik	24101314024	15 Days		
	12. Subham Mondal	24101314025	2 Weeks		
	13. Sudip Sahoo	24101314026	15 Days		
	14. Supriya Pradhan	24101314028	15 Days & 18		
	1 2		Days		
	15. Piva Shree Dutta	24101314039	15 Davs		
	16. Riya Mazumdar	24101314040	15 Days		
	17. Asmita Mandal	24101315054	22 Davs		
	18. Debabrata Sarkar	24101315057	22 Davs		
	19. Koushik Mandal	24101315061	22 Days		
3	Kasturi Das	24101315060	15 Davs	Irrigation &	
5.				Waterways	
				Deptt., Govt	
Δ	Suman Shekhar	24101314027	30 Davs	Heavy	
		the second		Engineering	
		6113		Corporation	
		ELEY.		, Ranchi	
5	Sarthak Naskar	24101314016	30 Days	Simplex	
5.		21101511010	50 Duys	Infrastructu	
		SIL MA		re Limited	
6	Souvik Mahata	24101214022	20 Dave	Dalhi	
0.	Souvik Ivialiata	24101314023	30 Days	Transport	
	Tipe	m L Lie T	0.95	Corporation	
		AL DU LES -		Corporation	
7	1 Animadalla Manadal	24101214002			
1.	1. Amruduna Mondal	24101314003			
	2. Sourav Das	24101314020			
	5. AVIJII KOY	24101314020			
	4. Tanmoy Roy	24101315083			
	5. Santanu Bnakta	24101315070			

15.0 STUDENT'S MENTORSHIP:

Name of Faculty	Students Roll	Frequency of	Remarks
	No.	interactions	
Mr. Saptarshi Nandi	24101317043	Once in a	1. Collected their certificates and
	to	week	testimonials
	24101317045		2. Problems and doubts regarding the
	(2 nd Year)		different classes and others college

	24101316027		activities had been discussed and
	to		necessary action had taken.
	24101316037		3. Encourage them to attain the
	(3 rd Year)		regular classes and submit the
			assignment within schedule time.
	24101215001		4. Encourage them to take
	24101313001		participation in different cultural
	10		programme quiz and debate
	24101315011		competition
	(4 th Year)		
Mr. Samik Banerjee	24101317046	Once in a	1. Collected their certificates and
	to	week	testimonials
	24101317048		2. Problems and doubts regarding the
	(2 nd Year)		different classes and others college
	24101316038		activities had been discussed and
	to		necessary action had taken.
	24101316048	100	3. Encourage them to attain the
	(3 rd Year)		regular classes and submit the
	24101315012	And the second s	assignment within schedule time.
	to		4. Encourage them to take
	24101315022		participation in different cultural
	(1 th Vear)	the second	programme, quiz and debate
	(4 1 cai)	1231	competition.
Mr Asim Mazumder	24101317049	Once in a	1 Collected their certificates and
	to	week	testimonials
	24101317051	Week	2 Problems and doubts regarding the
	(2^{nd} Year)	and the second	different classes and others college
	(2 1001)	Fill mar	activities had been discussed and
	24101316049		necessary action had taken
	to		3 Encourage them to attain the
	24101316059		s. Encourage them to attain the
	(3 rd Year)	a how has	assignment within schedule time
	24101315023	The last by the bellet	A Encourage them to take
	to		4. Encourage them to take
	24101315034		participation in different cultural
	(4 th Year)		programme, quiz and debate
			competition.
Mr. Anubhab Das	24101317052	Once in a	1. Collected their certificates and
	to	week	testimonials
	24101317054		2. Problems and doubts regarding the
	(2 nd Year)		different classes and others college
	04101010000		activities had been discussed and
	24101316060		necessary action had taken.
	to		3. Encourage them to attain the
	24101317010		regular classes and submit the
	(3 rd Year)		assignment within schedule time.
			4. Encourage them to take
	24101315035		participation in different cultural
	to		programme, quiz and debate
	24101315046		competition.
	(4 th Year)		1
Dr. Anindita Kundu	24101317055	Once in a	1. Collected their certificates and
	to	week	testimonials
	24101317057		2. Problems and doubts regarding the

Miss Moumita Ghosh	(2 nd Year) 24101317011 to 24101317021 (3 rd Year) 24101315047 to 24101316006 (4 th Year) 24101317058 to 24101317061 (2 nd Year) 24101317022 to 24101317032 (3 rd Year) 24101316007	Once in a week	 different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural programme, quiz and debate competition. 1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural
	to 24101316016 (4 th Year)	E.S	programme, quiz and debate competition.
Miss Payel Dutta	24101317062 to 24101317065 (2 nd Year) 24101317033 to 24101317066 (3 rd Year) 24101316017 to 24101316026 (4 th Year)	Once in a week	 Collected their certificates and testimonials Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. Encourage them to attain the regular classes and submit the assignment within schedule time. Encourage them to take participation in different cultural programme, quiz and debate competition.

16.0 DEPARTMENTAL BUDGET:

	Swami Vivekananda Institute of Science & Technology				
	Sonarpur,Kolkata-700145				
	Budget and Allocation Statement				
	Dept of Civil Engineering Rs. In Lacs				
	Accounts Head2017-2018BudgetedAllocation				
		Amount.	Amount.		
	Capital Equipment	2.00	2.00		

Library Books	1.00	1.00
Research & Development	1.00	1.00
Furniture & Fixture	0.5	0.5
Laboratory Equipments	2.75	2.75
Visiting Faculty Remuneration	0.00	0.00
Laboratory Exp. Consumable	0.25	0.25
Laboratory Maintenance	0.50	0.50
Students Projects	0.50	0.50
Journal & Periodicals	0.25	0.25
Faculty Development & Initiative	0.75	0.75
Contingency Exp	0.50	0.50
Total	10.00	

Submitted by,

Saptarshi Nandi HOD (CE)

