



SARDAR VALLABHBHAI NATIONAL INSTITUTE OF
TECHNOLOGY, SURAT

SVNIT

No: Dean (Acad.)/IAAC/138/2022-23

Date: 16/05/2023

The minutes of the 62nd meeting of the Institute Academic Advisory Committee (IAAC)

The aforesaid meeting was held on 12th May 2023, 10:30 am onwards in the Institute Conference room, first floor, Administrative Building. The following members attended the IAAC meeting.

Sr. No.	Name	Designation
1	Dr. Anupam Shukla	Director, <i>Chairman</i>
2	Dr. Pramod Mathur	Registrar
3	Dr. Ravi Kant	Dean (Students' Welfare)
4	Dr. U.D. Dalal	Dean (Alumni & Resources Generation)
5	Dr. M. A. Desai	Head, Department of Chemical Engineering
6	Dr. S.J. Patel	In-charge Head, Department of Computer Science and Engineering
7	Dr. A. K. Panchal	Head, Department of Electrical Engineering
8	Dr. Rasika Dhavse	Head, Department of Electronics Engineering
9	Dr. A.A. Shaikh	Head, Department of Mechanical Engineering
10	Dr. Jayesh M. Dhodiya	Head, Department of Mathematics and Humanities
11	Dr. Dimple V. Shah	Head, Department of Physics
12	Dr. H. R. Jariwala	Associate Dean (Academic)
13	Dr. D.R. Roy	Associate Dean (Academic)
14	Dr. R.K. Jana	Associate Dean (Academic)
15	Dr. N. D. Jariwala	Associate Dean (Research and Consultancy)
16	Dr. M.A. Zaveri	Dean (Academic), <i>Member-Secretary</i>
Invitee(s)		
18	Shri Amit C. Patel	In-Charge Deputy Registrar (Academic)
19	Mr. Raghav Khandelwal	Students' General Secretary

The following could not attend the meeting.

Sr. No.	Name	Designation
1	Dr. D.C. Jinwala	Dean (Research and Consultancy)
2	Dr. V. L. Manekar	Dean (Planning and Development)

Sr. No.	Name	Designation
3	Dr. C.D. Modhera	Dean (Faculty Welfare)
4	Dr. S.S. Arkatkar	Associate Dean (Planning and Development)
5	Dr. Sushil Kumar	Associate Dean (Faculty Welfare)
6	Dr. Y.D. Patil	Associate Dean (Planning and Development)
7	Dr. H.B. Mehta	Associate Dean (Research and Consultancy)
8	Dr. S.R. Patel	Associate Dean (Students' Welfare)
9	Dr. M.K. Rathod	Associate Dean (Research and Consultancy)
10	Dr. G.J. Joshi	Head, Department of Civil Engineering
11	Dr. S.K. Sahoo	Head, Department of Chemistry
12	Mr. Sarvesh Kumar	Academic Affairs Secretary (AAS)
13	Ms. Janavi Popat	Research Innovation Affairs Secretary

Items and Resolutions

Item No.	Agenda Item	Remarks
Item 1	Regarding releasing Academic Regulation 2023-24 onwards and publishing on the institute web site.	
Reso.1	The draft version of the Academic Regulations is presented in the meeting. The various aspects of it are discussed. It is decided to circulate the draft version to all IAAC members and department faculty members for their review and comments. It is suggested that a committee consisting of Prof. D. C. Jinwala (HAG, DoCSE) Dean (R & C), Prof. K. P. Desai (Professor, DoME), Prof. A. A. Shaikh (HoD, DoME) and Dean Academics will go through the draft version of Academic Regulations for editorial and technical overview. The draft version of Academic Regulations including modifications and various suggestions received from IAAC members and will be presented before the ensuing Senate.	
Item 2	Regarding publishing the Curriculum Structure on the institute website with code assignment to the subject for each program as per the approved NEP curriculum scheme.	
Reso. 2	The curriculum as per NEP implementation for each UG and M.Sc. programme is reviewed by the department for publishing on the institute website. It is decided to publish the curriculum which is effective from the academic year 2023-24 for UG and M.Sc. programmes.	
Item 3	To consider the recommendations of DAAC, Department of Civil Engineering	
	(1) A request to change of supervisor and co-supervisor of Ms. Namrata Chandel (D17CE010-PEC) working under the supervision of Dr. P.L. Patel, Professor, DoCE and Dr. R.K. Shrivastava, Ex-professor, SGSITS, Indore to Dr. P.G. Agnihotri, Professor, DoCE and Co-supervisor to Dr. J.N. Patel, Professor, DoCE as she wishes to change / modify her research area.	Academic Regulations for Doctoral Programme (July 2019)

	<p>(i) She has also requested to change her RPS committee members.</p> <p>(ii) She has also requested for two years time extension since her admission is before the year of COVID.</p> <p>(iii) She has requested to carry forward the credit earned by her during course work.</p> <p>(Resolution no. 54.7 of the 54th meeting of the DAAC held on 07/03/2023).</p> <p>A consent letter of Dr. P.G. Agnihotri and Dr. J.N. Patel submitted with the DAAC recommendation.</p>	10.3.1 (a & b) and 11.5 (a)						
(2)	<p>To consider a request of Vrunda H. Agarkar (DS14AM007), enrolled in the PEC category and working under the supervision of Dr. A.K. Desai (Professor, Department of Civil Engineering), for 6 month extension for submission of Pre Synopsis and Ph.D. thesis as she has 2 papers accepted in Journal within time limit of 7 years and RPS committee have also recommended for pre-synopsis on 24/05/2022. the Scholar has completed the seven-and half-year duration (the extended duration for the COVID reason) on July 13, 2022</p> <p>It was resolved in the 57th meeting of IAAC held on 22/7/22</p> <p>(i) The research Scholar would meet two Journal publication requirements (resolution 18th of the minutes of the meeting of the 32nd Senate held on 15th February 2014), including the requirements of RPS, pre-synopsis seminar, synopsis and thesis submissions, on or before January 02, 2023. This resolution is under a 'special case consideration' (Resolution no. 54.8 of the 54th meeting of the DAAC held on 07/03/2023).</p>	(Reso. 2 of the 57 th meeting of IAAC held on 22/7/2022)						
(3)	<p>A request of Ms. Sejal Chandel (D21CE018), working under the supervision of Dr. V.L. Manekar and Dr. J.N. Patel, for the category conversion from the FSF to PEC (resolution no. 54.9 of the 54th of the DAAC held on 7/03/2023). The students have completed 3 semesters and also submitted 'No Objection Certificates' from the respective Employers with the recommendations. (Joined Buro Happold on 17/2/2023 as Flood Modelling Engineer.)</p>	Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)						
(4)	<p>About the 'discontinuation' of a supervisor for Ph.D. Student Ms. Neha Baghele (DS18CE003) enrolled in the FIR category (resolution no. 54.13 of the 54th meeting of the DAAC held on 09/03/2023).</p> <table><tr><th>Existing arrangement</th><th>Proposed arrangement</th></tr><tr><td>Dr. A.K. Khambete Retired Professor, Department of Civil Engineering, SVNIT, Surat</td><td>Dr. R.A. Christian Professor, Department of Civil Engineering, SVNIT, Surat</td></tr><tr><td>Dr. R.A. Christian Professor, Department of Civil Engineering, SVNIT, Surat</td><td></td></tr></table> <p>A consent mail of Dr. A.K. Khambete received on 17/03/2023.</p>	Existing arrangement	Proposed arrangement	Dr. A.K. Khambete Retired Professor, Department of Civil Engineering, SVNIT, Surat	Dr. R.A. Christian Professor, Department of Civil Engineering, SVNIT, Surat	Dr. R.A. Christian Professor, Department of Civil Engineering, SVNIT, Surat		Academic Regulations for Doctoral Programme (July 2019) 10.3.1. (a)
Existing arrangement	Proposed arrangement							
Dr. A.K. Khambete Retired Professor, Department of Civil Engineering, SVNIT, Surat	Dr. R.A. Christian Professor, Department of Civil Engineering, SVNIT, Surat							
Dr. R.A. Christian Professor, Department of Civil Engineering, SVNIT, Surat								
(5)	<p>A request of Mr. Akshay J. Pawar (DS17AM007), working under the supervision of Dr. S.R. Suryawanshi, for the category conversion from the FIR to PEC (resolution no. 54.18 of the 54th of the DAAC held on 9/03/2023). The students have completed 5 years, Ph.D. fellowship tenure was over and also submitted 'No Objection Certificates' from the respective Employers with the recommendations. (Joined Jawahar</p>	Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)						

		Education Society's, Institute of Technology, Management & Research, Nashik on 09/2/2023 as assistant Professor.)							
	(6)	To consider the request of Structural Engineering Section for addition of new Elective Subject "Structural Health Monitoring (SHM, CEST220)" in M.Tech. Structural Engineering. (Reso. 55.3 of the 55 th meeting of the DAAC held on 19/4/23). Annexure 3.6							
	(7)	To consider the application received from Dawda Nandan H. (DS17CE010) working under the supervision of Dr. G.J. Joshi for 2 months extension for Ph.D. thesis submission. (Reso. 55.4 of the 55 th meeting of the DAAC held on 19/4/23).	Academic Regulations for Doctoral Programme (July 2019) 12.2 (a)						
	(8)	A request of Mr. Rudradatta K. Mehta (D17AM001), working under the supervision of Dr. G.R. Vesmawala, for the category conversion from the FIR to PEC (resolution no. 55.5 of the 55 th of the DAAC held on 19/04/2023). The students have completed 5 years, Ph.D. fellowship tenure was over and also submitted 'No Objection Certificates' from the respective Employers with the recommendations. (Joined GSM Soil and Material Testing Laboratory Pvt. Ltd. on 01/3/2023 as Junior Laboratory Engineer)	Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)						
	(9)	<table><tr><td colspan="2">About the 'addition' of a co-supervisor for Ph.D. Student Bicky Agarwal (D22CE008) enrolled in the FIR category (resolution no. 55.6 of the 55th meeting of the DAAC held on 19/04/2023).</td></tr><tr><td>Existing arrangement</td><td>Proposed arrangement</td></tr><tr><td>Dr. Ashish Dhamaniya Associate Professor, Department of Civil Engineering, SVNIT, Surat</td><td>Dr. Ashish Dhamaniya Associate Professor, Department of Civil Engineering, SVNIT, Surat Dr. Ambika Behl Sr. Principal Scientist, CSIR-CRRI, New Delhi</td></tr></table> <p>A consent mail of Dr. Ambika Behl received on 17/04/2023.</p>	About the 'addition' of a co-supervisor for Ph.D. Student Bicky Agarwal (D22CE008) enrolled in the FIR category (resolution no. 55.6 of the 55 th meeting of the DAAC held on 19/04/2023).		Existing arrangement	Proposed arrangement	Dr. Ashish Dhamaniya Associate Professor, Department of Civil Engineering, SVNIT, Surat	Dr. Ashish Dhamaniya Associate Professor, Department of Civil Engineering, SVNIT, Surat Dr. Ambika Behl Sr. Principal Scientist, CSIR-CRRI, New Delhi	Academic Regulations for Doctoral Programme (July 2019) 10.6 (c)
About the 'addition' of a co-supervisor for Ph.D. Student Bicky Agarwal (D22CE008) enrolled in the FIR category (resolution no. 55.6 of the 55 th meeting of the DAAC held on 19/04/2023).									
Existing arrangement	Proposed arrangement								
Dr. Ashish Dhamaniya Associate Professor, Department of Civil Engineering, SVNIT, Surat	Dr. Ashish Dhamaniya Associate Professor, Department of Civil Engineering, SVNIT, Surat Dr. Ambika Behl Sr. Principal Scientist, CSIR-CRRI, New Delhi								
Reso. 3	<p>Sub item 1: as per Academic Regulations 10.3.1 (a & b) and 11.5 (a), the IAAC has concluded that she shall be allowed for fresh registration and the coursework completed earlier by her will be counted as special consideration with fresh registration and she can appear for the first RPS.</p> <p>Sub item 2: as per Academic Regulation 11.5 (a) and Reso. 2 of the 57th meeting of IAAC held on 22/7/2022. She completed the seven and half year duration (the extended duration for the COVID reason) on July 13, 2022, and she had been asked to complete the requirements of RPS, journal papers, pre-synopsis seminar, synopsis, and thesis submissions, on or before January 02, 2023 as per resolution under a 'special case consideration' (Resolution no. 54.8 of the 54th meeting of the DAAC held on 07/03/2023). But she did not complete the requirement within the time limit provided. In this view, her admission will be treated as terminated/cancelled as she has already completed 8 years. She has to apply again for PhD admission.</p>								

	<p>Sub item 3, approved as per Academic Regulation 11.3 (d).</p> <p>Sub item 4, approved as per Academic Regulation 10.3.1. (a)</p> <p>Sub item 5, approved as per Academic Regulation 11.3 (d).</p> <p>Sub item 6, syllabus of Elective Subject “Structural Health Monitoring (SHM, CEST220)” in M.Tech. Structural Engineering is approved Annexure 3.6</p> <p>Sub item 7, approved as per Academic Regulation 12.2 (a).</p> <p>Sub item 8, approved as per Academic Regulation 11.3 (d).</p> <p>Sub item 9, approved as per Academic Regulation 10.6 (c)</p>																
Item 4	To consider the recommendations of DAAC, Department of Computer Science and Engineering																
	A request of Supriya Mishra (DS20CO002), working under the supervision of Dr. B.N. Gohil and Dr. Suprio Ray, University of New Brunswick, Canada, for the category conversion from the FIR to PEC w.e.f. 15/7/2023 (resolution no. 1 of the DAAC held on 4/05/2023). The students have completed 3 semesters and also submitted ‘No Objection Certificate’ from the respective Employers with the recommendations. (She will join Vikasalaya Foundation.)	Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)															
	Approved as per Academic Regulation 11.3 (d).																
Item 5	To consider the recommendations of DAAC, Department of Electrical Engineering																
	<p>(1) To discuss about the reframing of PEOs, and PSOs of the ‘Two’ M. Tech. Programmes of the Department of Electrical Engineering.: Power Electronics & Electrical Drives and Power Systems (Resolution no. 2 of the 67th meeting of the DAAC held on 03/03/2023) Annexure-5.1.</p> <p>This revision is made following resolution 7 of the 51st meeting of the Senate that discusses the credit range and structural refinements etc. <a href="https://www.svnit.ac.in/Data/minutes/senate/51<sup>st</sup>%20Minutes.pdf">https://www.svnit.ac.in/Data/minutes/senate/51st%20Minutes.pdf</p>																
	<p>(2) The requests of the following Students for the Ph.D. category conversion from the FIR to PEC. (Resolution no. 3 of the 67th meeting of the DAAC held on 03/03/2023).</p> <table border="1"> <thead> <tr> <th>Name of Student</th><th>Job Joining Date</th><th>Name of Supervisor / Co-supervisor</th></tr> </thead> <tbody> <tr> <td>Athul Vijay P.K. (DS17EL008)</td><td>16/1/2023</td><td>Dr. V.A. Shah</td></tr> <tr> <td>Ujjval B. Vyas (DS18EL009)</td><td>16/1/2023</td><td>Dr. V.A. Shah</td></tr> <tr> <td>Harshada Nerkar (DS17EL002)</td><td>23/1/2023</td><td>Dr. P.Kundu & Dr. Aandita Chowdhury</td></tr> <tr> <td>Anish Tiwari (DS18EL009)</td><td>6/02/2023</td><td>Dr. Aandita Chowdhury</td></tr> </tbody> </table> <p>The students have completed 3 semesters and also submitted ‘No Objection Certificates’ from the respective Employers with the recommendations.</p>	Name of Student	Job Joining Date	Name of Supervisor / Co-supervisor	Athul Vijay P.K. (DS17EL008)	16/1/2023	Dr. V.A. Shah	Ujjval B. Vyas (DS18EL009)	16/1/2023	Dr. V.A. Shah	Harshada Nerkar (DS17EL002)	23/1/2023	Dr. P.Kundu & Dr. Aandita Chowdhury	Anish Tiwari (DS18EL009)	6/02/2023	Dr. Aandita Chowdhury	Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)
Name of Student	Job Joining Date	Name of Supervisor / Co-supervisor															
Athul Vijay P.K. (DS17EL008)	16/1/2023	Dr. V.A. Shah															
Ujjval B. Vyas (DS18EL009)	16/1/2023	Dr. V.A. Shah															
Harshada Nerkar (DS17EL002)	23/1/2023	Dr. P.Kundu & Dr. Aandita Chowdhury															
Anish Tiwari (DS18EL009)	6/02/2023	Dr. Aandita Chowdhury															
	<p>(3) To consider the course contents of the subject “Research Methodology” to be floated as an elective at PG level and as a</p>																

	compulsory subject for Ph.D. students at the department level. (Resolution no. 2 of the 68 th meeting of the DAAC held on 21/03/2023) Annexure-5.3. EL802 Research Methodology 4 Credits 100 Marks.	
(4)	A request of Totan Das (D21EL010), working under the supervision of Dr. V.A. Shah for the category conversion from the FIR to PEC (resolution no. 3 of the 68 th meeting of the DAAC held on 21/03/2023). The students have completed 3 semesters and also submitted 'No Objection Certificates' from their respective Employers with the recommendations. (Joined Hinode Technologies Pvt. Ltd. On 6/3/23 as Hardware Development Engineer.)	Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)
(5)	A request of Deepkumar V Patel (D20EL001), working under the supervision of Dr. R. Chudamani, for the category conversion from the FIR to PEC (resolution no. 1 of the 69 th meeting of the DAAC held on 28/04/2023). The students have completed 3 semesters and also submitted 'No Objection Certificates' from the respective Employers with the recommendations. (Joined Gujarat State Electricity Corporation Ltd. on 3/1/23 as Junior Engineer.)	Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)
(6)	To discuss about the reframing of PEOs, and PSOs of B.Tech. Electrical Engineering as per the course structure in NEP. (Resolution no. 3 of the 69 th meeting of the DAAC held on 28/04/2023) Annexure 5.6.	
Reso. 5	Sub item 1: PEOs-PSOs statements of the 'Two' M. Tech. Programmes Power Electronics & Electrical Drives and Power Systems respectively approved Annexure-5.1. Sub item 2, approved as per Academic Regulation 11.3 (d). Sub item 3, syllabus of Research Methodology approved Annexure-5.3 as three credits course with the scheme (3-0-0). The department is requested to submit the syllabus accordingly. The same subject can be offered to Ph.D. student also. Sub item 4 & 5, approved as per Academic Regulation 11.3 (d). Sub item 6, PEOs-PSOs statements is of B.Tech. Electrical Engineering as per the course structure in NEP approved Annexure-5.6.	
Item 6	To consider the recommendations of DAAC, Department of Electronics Engineering	
(1)	A request of Ms. Meenakshi Parashar (DS20EC003), working under the supervision of Dr. Shilpi Gupta, for the category conversion from FSF to PEC (resolution no. 1 of the 77 th meeting of the DAAC held on 12/4/2023). The students have completed 3 semesters and also submitted 'No Objection Certificate' from the respective Employers with the recommendations. (Joined Rudra Construction as Management Systems Technician/Operator)	Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)
(2)	A request of Mr. Shashidhara M (DS20EC007), working under the supervision of Dr. Abhishek Acharya, for the category conversion from FIR to PEC. (Resolution no. 2 of the 77 th meeting of the DAAC held on 12/4/2023). The students have completed 3 semesters and also submitted 'No Objection Certificate' from the respective Employers with the recommendations. (Joined PES University, Bangalore on 20/3/23 as Assistant Professor)	Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)
Reso. 6	Sub item 1 & 2, approved as per Academic Regulation 11.3 (d).	

Item 7	To consider the recommendations of DAAC, Department of Mechanical Engineering			
	(1)	A request of Mr. Nitin Bagre (DS18ME008), working under the supervision of Dr. A.D. Parekh, for the category conversion from the FIR to PEC (resolution no. 68.3 of the 68 th of the DAAC held on 27/02/2023). He has submitted Pre-Synopsis on 16/02/23. DAAC approved the same as per Academic Regulations for Doctoral Programmes July – 2019 [11.5 (b)]. i.e. The scholar who has delivered pre-synopsis of the thesis may be permitted by IAAC on recommendation of DAAC to leave the Institute and submit the thesis from outside within six months, they fulfil the provision of all other rules. Fellowship stopped w.e.f. 16/02/2023.		Academic Regulations for Doctoral Programme (July 2019) 11.5. (b)
	(2)	A request of Mr. Bhoskar Avishkar Ramchandra (D18ME012), working under the supervision of Dr. V.D. Kalyankar, for the category conversion from the FIR to PEC (resolution no. 68.5.1 of the 68 th of the DAAC held on 27/02/2023). He has submitted Pre-Synopsis on 30/12/2022. DAAC approved the same as per Academic Regulations for Doctoral Programmes July – 2019 [11.5 (b)]. i.e. The scholar who has delivered pre-synopsis of the thesis may be permitted by IAAC on recommendation of DAAC to leave the Institute and submit the thesis from outside within six months, they fulfil the provision of all other rules. Fellowship stopped w.e.f. 16/02/2023.		Academic Regulations for Doctoral Programme (July 2019) 11.5. (b)
Reso. 7	Sub item 1 & 2, approved as per Academic Regulation 11.5. (b)			
Item 8	To consider the recommendations of DAAC, Department of Chemistry			
	(1)	To consider the B.Tech.-I syllabus of the Engineering Science course for the Department of Civil Engineering (Resolution no. 2 of the 112 th meeting of the DAAC held on 13/03/2023) Annexure 8.1.		
	(2)	A request of Ayushi Patel (D20CY014), working under the supervision of Dr. Kalpana Maheria, for the category conversion from FSF to PEC (resolution no. 2 of the 116 th meeting of the DAAC held on 08/5/2023). The students have completed 3 semesters and also submitted ‘No Objection Certificate’ from the respective Employers with the recommendations. (Joined Enviro Care Technocrats Pvt. Ltd.)		Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)
	(3)	To consider the B.Tech.-I syllabus of the Applied Chemistry for the Department of Chemical Engineering (Resolution no. 4 of the 116 th meeting of the DAAC held on 08/05/2023) Annexure 8.3.		
Res. 8	Sub item1, B.Tech.-I syllabus of the Engineering Science course for the Department of Civil Engineering is approved Annexure 8.1. Sub item 2, approved as per Academic Regulation 11.3 (d). Sub item 3, syllabus of the Applied Chemistry for the Department of Chemical Engineering approved Annexure 8.3.			
Item 9	To consider the recommendations of DAAC, Department of Physics			
	(1)	The requests of the following Students for the Ph.D. category conversion (Resolution no. 4 of the 40 th meeting of the DAAC held on 18/02/2023).		Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)
		Name of Student	Category Conversion Date	
		Jasani Jaykumar Rajeshbhai	2/1/2023	
			Name of Supervisor / Co-supervisor	
			Dr. Yogesh	

		(D20PH001) FRS to PEC		Sonvane		
		Zainitkumar Arjanbhai Dhameliya (D20PH010) FRS to PEC	3/1/2023	Dr. D.R. Roy		
		Mauleshkumar Dahyabhai Vala (DS20PH003) FIR to PEC	2/1/2023	Dr. Yogesh Sonvane		
		The students have completed 3 semesters and also submitted 'No Objection Certificates' from the respective Employers with the recommendations.				
	(2)	The requests of the following Students for the Ph.D. category conversion from FIR to PEC (Resolution no. 8.1 of the 40 th meeting of the DAAC held on 18/02/2023).				Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)
		Name of Student	Category Conversion Date	Name of Supervisor / Co-supervisor		
		Bhautik Gevariya (D20PH014) FIR to PEC	3/1/2023	Dr. Vipul Kheraj		
		Akram Nasimbhai Ansari (DS21PH002) FRS to PEC	11/1/2023	Dr. A.K. Rai		
		The students have completed 3 semesters and also submitted 'No Objection Certificates' from the respective Employers with the recommendations.				
	(3)	A request of Bhavin Moida (D20PH005), working under the supervision of Dr. K.N. Pathak for the category conversion from the FRS to PEC (resolution no. 4 of the 41 st meeting of the DAAC held on 07/03/2023). The students have completed 3 semesters and also submitted 'No Objection Certificates' from the respective Employers with the recommendations.				Academic Regulations for Doctoral Programme (July 2019) 11.3 (d)
	(4)	To approve the B.Tech. 1 st year course on Physics for the Electrical Engineering Department Annexure 9.4 (resolution no. 3 of the 42 nd meeting of the DAAC held on 17/04/2023).				
	(5)	To consider a request of Adish V. Rawal (D17PH004), enrolled in the PEC category and working under the supervision of Dr. L.K. Saini and Dr. D.V. Shah, for 2 month (upto 10/6/2023) extension for submission of Ph.D. thesis. Synopsis submitted on 10/10/2022. (resolution no. 4.2 of the 42 nd meeting of the DAAC held on 17/04/2023)				Academic Regulations for Doctoral Programme (July 2019) 12.2 (a)
Reso. 9	Sub item 1,2 and 3, approved as per Academic Regulation 11.3 (d). Sub item 4, B.Tech. 1 st year course on Physics for the Electrical Engineering Department approved Annexure 9.4. Sub item 5 approved as per Academic Regulation 12.2 (a)					
Item 10	To consider the recommendations of DAAC, Department of Humanities and Social Sciences					
	To discuss the proposal for electives in foreign language like German and French. (Reso. 1 of 1 st meeting of the DAAC held on 4/5/23) The students of SVNIT need to acquire more skills and knowledge to keep					

	up with the global competition. In this regard, the department would offer 2 languages (i) French (ii) German as elective subject to UG students in 5 th and 6 th semesters and PG students in 2 nd semester. These language electives can be floated from the academic Year 2023-24. It was proposed that for teaching these two languages, the experts may be invited on an hourly basis. As it is a language course the batch size of 30 students in one class will be preferred. The subject offering can be started with a maximum of two batches for each language. The selection of students will be based on CGPA as per our existing institute norms. Syllabus was attached herewith as Annexure-10.	
Reso. 10	Approved.	
Item 11	To consider the recommendations of DAAC, Department of Chemical Engineering	
	<p>Admission Criteria for the Ph.D. Admission (Eligible Degree) (Reso. No.2 of the 105th meeting of the DAAC held on 6/4/2023).</p> <p>The Ph.D. Degree Certificate should be changed (name of discipline to be omitted) so as to include the interdisciplinary research. The candidates from discipline other than Chemical Engineering & allied branches should exhibit the research potential in the desired field of Chemical Engineering. Further upon changing the format, the degree allowed for the Ph.D. admission in the Department of Chemical Engineering are as follows:</p> <p>B.Tech./B.E./Equivalent and M.Tech./M.E./Equivalent in Chemical Engineering & allied branches</p> <p>B.Tech./B.E./Equivalent and M.Tech./M.E./Equivalent in Mechanical Engineering</p> <p>B.Tech./B.E./Equivalent and M.Tech./M.E./Equivalent in Civil Engineering</p> <p>B.Tech./B.E./Equivalent and M.Tech./M.E./Equivalent in Environmental Engineering</p> <p>B.Tech./B.E./Equivalent and M.Tech./M.E./Equivalent in Energy Engineering Technology</p> <p>B.Tech./B.E./Equivalent and M.Tech./M.E./Equivalent in Electronics Engineering</p> <p>B.Tech./B.E./Equivalent and M.Tech./M.E./Equivalent in Electrical Engineering</p> <p>B.Sc. and M.Sc. (or integrated M.Sc.) with GATE/NET/CSIR Exam qualification B.Pharm and M.Pharm</p>	
Reso. 11	<p>Regarding the PhD degree certificate, the HoD of Chemical Department is requested to provide the copy of such degree certificates from IITs and other reputed institutes for further discussion.</p> <p>For UG and PG eligible degree for PhD admission in Department of Chemical Engineering item is deferred for the next IAAC.</p>	
	<i>Any other Item by Chair</i>	
Item 12	Director informed the members about the scheduling of the Academic Audit.	
Reso. 12	Academic Audit will be scheduled in the month of August-September 2023.	

Item 13	Regarding the issuing digitally signed Degree Certificate.	
Reso. 13	Director informed the members during the recent visit to IIT Gandhinagar, it is observed that IIT Gandhinagar is issuing the digitally signed Degree Certificate. It is suggested by the Director that Associate Dean and Staff members of Academic Section should explore such option and visit the IIT Gandhinagar in this connection.	

M. J. Lawrence
16.5.23
Member-Secretary, IAAC

3-11-23 21:40
17.5.23
Director

M.Tech. (Structural Engg)
CEST220: Structural Health Monitoring

L	T	P	C
3	-	-	3

Course Outcomes (COs):

At the end of the course, the students can able to



1. Demonstrate the fundamentals of SHM
2. Understand the sensor and sensing technology
3. Analysis of the data derived from SHM
4. Apply suitable piezoelectric materials and smart materials
5. Identify techniques to fix the structural damages

Unit	Topics	Hours
1	<ul style="list-style-type: none"> • Structural Health Definition, Principles, Factors affecting Health of Structures, Causes of Distress, Regular Maintenance 	3
	<ul style="list-style-type: none"> • Introduction to SHM Aims of structural health monitoring, development of SHM methods, SHM systems and its components, SHM strategy and method, potential benefits of SHM 	5
2	<ul style="list-style-type: none"> • Sensor and sensing technology for SHM Sensor types, sensor measurements in structural monitoring, fibre optic sensors, wireless sensors, optimum sensor selection and placement, some case studies 	7
3	<ul style="list-style-type: none"> • Data acquisition, transmission and management Data acquisition systems, data transmission systems, data processing systems, data management systems, case study 	12
4	<ul style="list-style-type: none"> • Structural damage identification techniques Acoustic emission, ultrasound, Guided waves, thermography, electromagnetic methods, capacitive methods, laser doppler vibrometer, global positioning system, comparison of NDT and SHM, signal processing for damage detection, data based versus modal based techniques, development of vibration-based methods. IoT applications in SHM 	12
5	<ul style="list-style-type: none"> • Smart materials & structures Concept of Smart Materials & Smart Structures with SHM, Basics of Smart Materials like Piezoelectric, Shape Memory Alloys, ER & MR Fluids etc. 	6
Total Hours		45

BOOKS RECOMMENDED:

1. Bhalla, S., Moharana, S., Talakokula, V. and Kaur, N. (2017), Piezoelectric Materials: Applications in SHM, Energy Harvesting and Biomechanics, Ane Books Pvt. Ltd. (Indian Edition)

M. Tech. (PEED)	
Graduates of this programme will be able to	
PEO	<ol style="list-style-type: none"> 1. develop and implement power electronic solutions to ensure sustainable growth of the nation by serving in government/industry or other organizations. 2. design products to meet socio-economic needs of the country/world by innovative ideas. 3. disseminate their innovative ideas through effective oral communications and written presentations adopting lifelong learning attitude with integrity and ethics.
Graduates of this programme will be able to	
PSO	<ol style="list-style-type: none"> 1. develop and assess the performance of various models of power electronic converters and electrical drives. 2. apply modern control strategies in various applications of power electronics. 3. design real time testing systems for various applications of power electronic converters and electrical drives.


 07/03/23
 
 25/1/23

M. Tech. (Power System)

Programme Educational Objectives (PEOs)

Graduates of M. Tech. in Power System program will be able

1. to solve power system problems by employing contemporary techniques, tools and resources.
2. to develop products to meet social economic demand by innovative ideas, take up research and development work in the field of power and energy engineering.
3. to communicate effectively through oral and written presentation of technical reports, adopting lifelong learning with integrity and ethics.

Program-specific Outcomes (PSOs)

At the end of the program, students will have the ability to:

1. Analyse and assess the performance of different types of generation, transmission, distribution and protection mechanisms in power systems
2. Design and test various components of power systems in integrated way;
3. Deploy control strategies for various operations of power systems.

CLG
07/03/23

CLG
28/3/23

M.Tech. I (Semester – II)	L	T	P	C
EL802: RESEARCH METHODOLOGY	4	0	0	4

Course Outcomes	
At the end of the course, students will	
CO1	to understand the different research methodologies in different areas.
CO2	be able to apply the concepts in writing, presentation, and simulating different experiments.
CO3	be able to analyze the proposed work with existing approaches in the literature and interpret the research design through project development and case study analysis using appropriate tools.
CO4	be able to execute the technical presentation, and organization in writing the report and papers.
CO5	be able to design the algorithms and proof learned and communicate effectively through proper organization and presentation.

Course Contents	(04 Hours)
INTRODUCTION	
Research: Definition, Characteristics, Motivation and Objectives, Research Methods vs Methodology, Types of Research – Descriptive vs Analytical, Applied vs Fundamental, Quantitative vs Qualitative, Conceptual vs Empirical.	
METHODOLOGY	(06 Hours)
Research Process, Formulating the Research Problem, Defining the Research Problem, Research Questions, Research Methods vs. Research Methodology.	
LITERATURE REVIEW	(06 Hours)
Review Concepts and Theories, Identifying and Analysing the Limitations of Different Approaches.	
FORMULATION AND DESIGN	(06 Hours)
Concept and Importance in Research, features of a Good Research Design, Exploratory Research Design, Concept, Types and Uses, Descriptive Research Designs, Concept, Types and Uses, Experimental Design: Concept of Independent & Dependent Variables.	
DATA MODELING AND SIMULATIONS	(10 Hours)
Mathematical Modelling, Modelling from first principles, data-driven models, System identification techniques, methods for data classification and feature extraction, some numerical methods, regression etc. Introduction to MATLAB, Simulation Skills, Experimental skills.	
TECHNICAL WRITING AND TECHNICAL PRESENTATIONS	(06 Hours)
Technical writing and presentation in Latex, MS Word	
CREATIVITY AND ETHICS IN RESEARCH, INTELLECTUAL PROPERTY RIGHTS	(06 Hours)
Policy of Ethical Conduct, Regulatory Norms, Codes and Policies for Research Ethics, Ethical Decision Making, Research Misconduct.	
TOOLS AND TECHNIQUES FOR RESEARCH	(08 Hours)
Methods to Search Required Information Effectively, Reference Management Software, Software for Paper Formatting, Software for Detection of Plagiarism.	
DISCUSSION AND DEMONSTRATION OF BEST PRACTICES	(04 Hours)
Case Studies	
(Total Contact Time: 56 Hours)	

BOOKS RECOMMENDED (LATEST EDITION)

1. David Kmiec, Bernadette Longo, The IEEE Guide to Writing in the Engineering and Technical Fields, Wiley-IEEE Press, 2017, Online ISBN: 9781119070269.
2. A report from IEEE Authorship Series: How to write for technical periodicals and Conferences.

3. John W. Creswell, "Research Design: Qualitative, Quantitative, and Mixed Methods Approaches", SAGE Publications Ltd.
4. C.R. Kothari, "Research Methodology: Methods and Techniques", New Age International Publishers.
5. David Silverman, "Qualitative Research", SAGE Publications Ltd.
6. Norman K. Denzin and Yvonna Sessions Lincoln, "Handbook of Qualitative Research", SAGE Publications Ltd.
7. Michael Quinn Patton, "Qualitative Research and Evaluation Methods", SAGE Publications Ltd.

-*PROGRAM SPECIFIC OUTCOMES (PSOs)

- PSO1: To identify, formulate and investigate various problems of electrical engineering.
- PSO2: To analyse and solve the problems related to electrical engineering using modern techniques and tools.
- PSO3: To design, simulate, and make prototype of electrical equipment like, electrical machines and drives, power transmission and distribution, power electronic converters and control system.

PROGRAM EDUCATIONAL OBJECTIVE (PEOs)

- PEO1: To model, design and develop a product, component or process in the field of electrical engineering to meet social and economic demand.
- PEO2: To pursue higher education in Engineering, Science, Management, Research and Development work in the field of electrical engineering.
- PEO3: To communicate effectively through oral and written presentation of technical reports, adopting lifelong learning with integrity and ethics.

Handwritten signature
4/5/23

Engineering Science
ESXXX

L	T	P	Credit
2 (C)	0	2	03

Scheme

CO1 Acquire basic knowledge of water chemistry

CO2 Apply the basic concept of materials chemistry in civil engineering applications

CO3 Understand corrosion chemistry to protect different metals from corrosion

• **WATER** **(08 Hours)**

Structure of water, physical and chemical properties, Hydrogen bonding, Specifications for water in industries, types of water (raw water, cooling water, boiler water, nuclear water), Hardness of water, Estimation and units of Hardness, Boiler feed water, Boiler Problems - Scales & Sludge, Priming, Foaming, Carryover, Caustic Embrittlement, Boiler corrosion, Desalination. Water softening (lime-soda, zeolite and ion-exchange) methods.

• **POLYMER** **(06 Hours)**

Introduction of Polymers: Classification of polymers, nomenclature, functionality in polymers, number and weight average molecular weight, molecular weight distribution (PDI), Chain Architecture (Linear/Branched, Tacticity, Isomerism), homopolymers, copolymers, graft copolymers and their characteristic properties in reference to their applications. Types of polymerization: addition, condensation, chain growth and step growth. Polymerization techniques: bulk, suspension and emulsion polymerization. Moulding constituents of Polymer, Moulding (Injection, Extrusion and Compressing) methods.

• **CHEMISTRY OF MATERIALS** **(11Hours)**

Alloys: Introduction, Necessity of making alloys, classification, Metal-Metal alloy: Brass (properties and applications), Metal-Non-metal alloy: Steel (properties), Composites: Introduction, classification, particulate composites, structural composites (Laminar and Sandwich), Advantages and applications of Composites, Nanomaterials – properties synthesis (sol-gel) and applications.

Cement Chemistry: Cement– its constituents and their structures, classification of cement, hydration process and importance of the products of hydration, chemistry of pozzolanic reactions. Analysis of Portland cement with reference to insoluble residue, total silica, sesquioxides, iron, lime and manganese. Role of calcium hydroxide in cement.

Soil Chemistry: Chemical composition of soils, types of clay minerals, soil colloids, diffused double layers, sorption processes, cation and base exchange phenomenon in soils, isomorphous substitution.

• **CORROSION AND ITS CONTROL** **(05 Hours)**

Introduction, types and mechanism of (Chemical and Electrochemical) corrosion, Types of Electrochemical corrosion (Galvanic, Pitting, Crevice), Passivity, Galvanic series, Factors influencing corrosion, Protective measures against corrosion: (i) Modification of the environment

(ii) Modification of the properties of the Metal (iii) Prevention of corrosion by Materials selection and Design (iv) Other corrosion prevention methods.

(Total Lecture Hours: 30)

PRACTICALS:

1. Iodometric determination of Cu in Brass sample.
2. Complexometric determination of hardness of water.
3. Estimation of COD in waste water.
4. Determination of DO in waste water.
5. Estimation of CaO in cement solution.
6. Estimation corrosion of metals (Fe and Zn) by agar gel.
7. Estimation of Ca^{2+} and Mg^{2+} ions in dolomite.
8. Manganometric determination of Iron(II) ion.
9. Determination of pH of soil sample

BOOK RECOMMENDED:-

1. Jain P.C. and Jain M. 'Engg. Chemistry' Dhanpat Rai Publishing Co. New Delhi, 15th Edition 2006.
2. Chawla S., 'A Textbook of Engineering Chemistry', Dhanpat Rai & Co., Latest Edition, 2015.
3. Tripathy S.K., Pandhy A.K. and Panda A.K. 'Material Science & Engineering', Scitech Publications (India) Pvt. Ltd., 2nd Edition, 2009.
4. Sposito, G., "Chemistry of Soils", 2nd Ed., Oxford University Press, 2008.
5. Taylor, H.F.W., Cement Chemistry, 2nd Ed. (reprinted), Thomas Telford Services Ltd., London, 2004.
6. Nad, A. K., Mahapatra, B., Ghoshal, A. An Advanced Course In Practical Chemistry, New Central Book Agency Pvt. Ltd., 2022.

Applied Chemistry

L	T	P	Credit
3	0	2	04

Course outcomes:

CO1	Acquaint with the purpose and operational steps of key water treatment processes used to improve water quality
CO2	Adapt corrosion chemistry to protect various metals used in industry from corrosion
CO3	Adapt polymer chemistry process in industrial applications
CO4	Understand the characteristics, synthesis and applications of different materials in a wide range of sectors
CO5	Understand interfaces and colloids with practical examples relevant for the environment and petrochemical industry.
CO6	Acquire skills to carry out the conductometric and pH titrations
CO7	Understand the importance of electroanalytical techniques in chemical analysis.
CO8	Perform the quantitative determination of various ions by using instrumentation methods

- **CHEMICAL ANALYSIS OF WATER**

[8 Hours]

Specifications for water in industries, types of water (raw water, cooling water, boiler water, nuclear water), cooling water (Langelier Index and its treatment); Hardness of water, Estimation and units of Hardness, Boiler feed water, Boiler Problems - Scales & Sludge, Priming, Foaming, Carryover, Caustic Embrittlement, Boiler corrosion, Desalination. Water softening (lime-soda, zeolite and ion-exchange) methods.

- **POLYMERS**

[6 Hours]

Introduction and classification of polymers, nomenclature, functionality in polymers, number and weight average molecular weight, degree of polymerization and molecular weight distribution (PDI), Chain Architecture (Linear/Branched, Tacticity, Isomerism), homopolymers, copolymers, graft copolymers; Types of polymerization: addition, condensation; Engineering polymers and applications, Biopolymers, conducting polymers

- **CHEMISTRY OF MATERIALS**

[6 Hours]

Engineering materials and its classification, Ferrous metals and alloys (steel and stainless steels), Non-ferrous metals and alloys, their properties and applications; Composites- Introduction, classifications, structure-property relations and applications.

- **CORROSION**

[6 Hours]

Introduction, types and mechanism of (Chemical and Electrochemical) corrosion, Types of Electrochemical corrosion (Galvanic, Pitting, Crevice), Pourbiax diagram, Passivity, Polarization, Galvanic series, Factors influencing corrosion, Corrosion control

- **SURFACE CHEMISTRY** [8 Hours]
Liquid- liquid and solid liquid interfaces – contact angle, wetting and spreading, adhesion and cohesion, contact angle measurements; Colloids and its types, lyophilic and lyophobic sols; characteristics, preparations, purification and properties (optical, kinetic and electrical) and applications. Associated colloids (surfactants), emulsions (role, types and preparation) and gels (types and properties).
- **BASIC INSTRUMENTATION TECHNIQUES** [8 Hours]
Principles and instrumentations: Conductometry, Colorimetry, Potentiometry, pH-metry; UV-Visible spectroscopy. Electrochemical measurements: methods and instruments.

[Total Lecture Hours: 42]

List of Practicals:

1. Determination of hardness of water
2. Estimation of COD
3. Determination of DO
4. Determination of Cu in brass alloy.
5. Acid-base pH metric titration
6. Trimetric determination of l - Ascorbic acid (Vitamin-C).
7. Estimation of Cl⁻ ion.
8. Estimation of corrosion by weight loss method
9. Conductometric titration to determine the strength of strong acid.
10. Demonstration: Concentration determination of Co as a Pollutant using Spectrophotometer.

BOOK RECOMMENDED:-

1. Jain P.C. and Jain M. 'Engg. Chemistry' Dhanpat Rai Publishing Co. New Delhi, 15th Edition 2006.
2. P. Atkins, Paula J. D., "Atkin's Physical Chemistry", Oxford (Indian Edition), Oxford University Press, 2012.
3. Tripathy S.K., Pandhy A.K. and Panda A.K. 'Material Science & Engineering', Scitech Publications (India) Pvt. Ltd., 2nd Edition, 2009.
4. Vogel A. I. and Mendham J., 'Vogel's Textbook of Quantitative Chemical Analysis Hall, 6th Edition, 2002.
5. Sharma B. K. 'Engg. Chemistry', Krishana Prakashan Media (P) Ltd, 2008
5. D. A. Skoog, F. J. Holler, T. A. Nieman, "Principles of Instrumental Analysis", sixth edition, 2006.
5. B. K. Sharma, "Engineering Chemistry", Krishna Prakashan Media (P) Ltd., Meerut, 2001.

L	T	P	C
3	0	2	4

B. Tech – I**Fundamental Physics (PH1)****1. Course Outcomes (COs)**

In the end of the semester, the students will be able to:

COURSE OUTCOMES		COGNITIVE LEVELS
CO1	Recall the basic principles of physics related to solid-state physics, quantum mechanics, photonics, and electromagnetism.	Remembering (C1)
CO2	Illustrate the various physical phenomena with interpretation based on the mathematical expressions involved.	Understanding (C2)
CO3	Apply the concepts/principles to solve the problems related to solid-state physics, quantum mechanics, photonics, and electromagnetism.	Applying (C3)
CO4	Analyze and examine the solution to the problems using physical and mathematical concepts involved.	Analyzing (C4)
CO5	Interpret and justify the results obtained from the experiments.	Evaluating (C5)

2. Syllabus

- SOLID-STATE PHYSICS**

(12 hours)

Crystallography – Crystalline and amorphous solids, Lattice and unit cell, Seven crystal system and Bravais lattices, Symmetry operation, Miller indices, Atomic radius, Coordination number, Packing factor calculation for SC, BCC, FCC, Bragg's law of X-ray diffraction, Rotating crystal method, Laue Method, Powder crystal method. *Nanomaterials* – Introduction, Synthesis of nano materials, Top down and Bottom up approach, Ball milling, PVD method, Applications. *Superconductivity* – Meissner effect, Type-I and Type-II superconductors. *Semiconductor physics* – Introduction, Direct and indirect band gap semiconductors, Intrinsic and extrinsic semiconductors, Law of Mass action, Charge neutrality, Hall effect.

- QUANTUM MECHANICS**

(8 hours)

Inadequacy of classical mechanics (black body radiation, photoelectric effect, bright line optical spectra), Electron diffraction, de Broglie concept of matter waves, Wave and Particle duality of radiation and matter, Heisenberg's uncertainty principle, Interpretation of wavefunction and probability density, Postulates of quantum mechanics, Schrodinger's wave equation, Eigenvalues and eigenfunctions, Superposition principle, Particle confined in one dimensional infinite potential box.

- PHOTONICS**

(10 hours)

Einstein's theory of matter radiation interaction and A & B coefficients, Properties of laser, Spontaneous and stimulated emission, Amplification of light by population inversion, Types of lasers: solid-state laser (Neodymium), gas lasers (CO₂), Optical fibre- principle [TIR] - types-material, mode, refractive index-Fibre loss-Expression for acceptance angle and numerical aperture, Application-Communication.

- ELECTROMAGNETISM**

(12 hours)

Overview of electrostatics and magnetostatics – divergence and curl of electric field, Gauss law and its applications, polarization, Internal field, Clausius-Mossotti relation, Lorentz force, Biot-Savart's law and

Ampere's law, Divergence and Curl of Magnetostatic fields, Magnetic materials, Magnetization, Faraday's law, Maxwell's equations, Continuity Equation, Wave solution of Maxwell Equations.

Total contact time -- 42 hours

Books Recommended:

1. C. Kittel, Introduction to Solid State Physics, John-Wiley 2016.
2. A. Beiser, Concept of the Modern Physics, McGraw-Hill 2008
3. R. Eisberg and R. Resnick, "Quantum Physics of Atoms, Molecules, Solids, Nuclei and Particles", John-Wiley, 2nd Edition, 2006
4. D. J. Griffiths, Introduction to electrodynamics, Pearson India.
5. R. Resnick and D. Halliday Physics (Part I & II), Wiley 2007.

Shan

Foreign language course in German

L T P C
3 0 0 3

1. Course Outcomes (COs)

At the end of the course the students will be able to:

CO1	Interpret texts written in German
CO2	Apply grammar rules correctly
CO3	Choose and employ appropriate words for communication
CO4	Analyze and infer from written, audio and video texts in German
CO5	Demonstrate awareness and interest in German culture

2. Syllabus

- **Fundamentals of the language and introduction to the culture:** (8 hours)
International words, the alphabet with unique German letters and pronunciation, numbers, names of days of the week, months, seasons, greetings of different types, vocabulary lists like food items, vehicles, common names used in Germany, names of cities and countries.
- **Grammar:** (8 hours)
Nouns, articles and types, negation, verbs conjugation and types, pronouns and types, plurals, conjunctions, adjectives, opposites, sentence word order, sentence types, sentence case, prepositions, tenses.
- **Listening:** (6 hours)
Dictation, native speakers tape scripts consisting dialogues, small talks, songs.
- **Speaking:** (7 Hours)
Drilling, introduction of self and others, asking for information and giving it, telephonic conversations, dialogues in different day to day situation like ordering food at a restaurant, shopping etc., small talk, hobbies, work and profession, telling the time.
- **Reading:** (6 Hours)
Comprehension unseen passages with tasks like question answers, true or false, newspaper advertisements, small texts, dialogues
- **Writing:** (8 Hours)
Making sentences using vocabulary, forming questions, small passages, letters and types, E-mails.
- **Film Viewing:** (2 Hours)
Frühstück bei den Berg, Einkaufen, Hast du Zeit?

(Total Contact Time - 45 Hours)

- **S'ouvrir à la culture (Open up to culture)**

(9 hours)

GRAMMAR- Les adjectifs démonstratifs (Demonstrative adjectives); Les verbes finir, sortir (The verbs to finish, to leave); Les adverbes de fréquence (Adverbs of frequency)

Le passé composé avec « être et avoir » (The past tense with “to be and to have”); L'imparfait (The imperfect). VOCABULARIES - Les sorties (The outings); La famille (Family); L'art (Art); Les vêtements et les accessoires (Clothing and accessories)

(Total Contact Time- 45 Hours)

3. Reference Books:

Marie-Noël Cocton and Dorothée Dupleix, *SAISON 1 A1+ Méthode de Français*, Didier (Goyal) 2017.

J. Girardet and J. Pécheur, *ECHO A1+ Méthode de Français*, Clé International, 2017.

Annie Berthet, Catherine Hugot et al, *Alter Ego*, Hachette Publisher, 2006;

Annie Berthet, Catherine Hugot et al., *Alter Ego, A1 – Cahier d'activités* - Hachette Publisher, 2006

Foreign language course in French

LTPC
3003**1. Course Outcomes (COs)**

At the end of the course the students will be able to:

CO1	Interpret texts written in French
CO2	Apply grammar rules correctly
CO3	Choose and employ appropriate words for communication
CO4	Analyze and infer from written, audio and video texts in French
CO5	Demonstrate awareness and interest in French culture

2. Syllabus

• **Mes cinq sens en action (My five senses in action)** (9 hours)

GRAMMAR- S'appeler, être, avoir, (To be called, to be, to have), Les articles définis. (Definite articles), Conditionnel de politesse: "Je voudrais", (Polite conditional: "I would like") VOCABULARIES- Les formules de salutations, Greeting formulas); L'alphabet (The alphabet); Quelques objets (Some objects); Les nationalités (Nationalities); Quelques lieux (Some places); Les pays (The countries); Les couleurs (Colors); Les nombres de 0 à 69. (Numbers from 0 to 69); Les jours de la semaine (The days of the week); Les mois de l'année (The months of the year); Les émotions (The emotions); Quelques consignes de classe (Some class instructions)

• **S'ouvrir aux autres (Open up to others)** (9 hours)

GRAMMAR- Les prépositions de lieu-1 (Prepositions of place-1); Les verbes en -er (The verbs in "er"); La négation (1) (Negation-1); Les articles indéfinis (The indefinite articles); Les questions (The questions); Les pronoms personnels (Personal pronouns). VOCABULARIES- Les professions (Professions); Quelques objets (Some objects); Les langues (Languages); Les nombres de 70 à 1000 (Numbers from 70 to 1000)

• **Partager son lieu de vie (Share your place of life)** (9 hours)

GRAMMAR- Le genre et le nombre des noms (Gender and number of nouns); Les verbes venir et aller (The verbs come and go); Le genre et le nombre des adjectifs (Gender and number of adjectives); Les adjectifs possessifs (Possessive adjectives); Les prépositions de lieu-2 (Prepositions of place-2). VOCABULARIES- L'habitat (The habitat); Les pièces, l'équipement (The rooms, the equipment); La description physique (The physical description); Les qualités et les défauts (The qualities and the defects)

• **Vivre au quotidien (Living everyday)** (9 hours)

GRAMMAR- Les articles contractés (The contracted articles); Les verbes: vouloir, pouvoir, devoir (The verbs: to want, to be able, have to); L'adjectif interrogatif (The interrogative adjective); Les verbes pronominaux (Pronominal verbs); Le futur proche (The near future); Le pronom « on » (The pronoun "on"). VOCABULARIES- Le temps libre et les loisirs (Free time and leisure); Les saisons (Seasons); Les activités quotidiennes (The daily activities); Le temps: le matin/ le soir... (Time: morning/evening...); L'heure (Time)

Recommended Books:

1. Netzwerk - Stefanie Dengler, Paul Rusch, Helen Schmitz, Tanja Sieber. Klett -Langenscheidt/Goyal Publishers. 2015
2. Learn German Through English by Vrinda Kulkarni. Tejal Prakashan, 2005/2013
3. MyGermanConnect by Vrinda Kulkarni, Flystone Publication, 2023
4. Tangram aktuell 1 - Hueber/Goyal Publishers, 2011

List of open learning websites:

<https://www.open.edu/openlearn/education-development/university-ready/free-online-german-courses>

https://www.deutsch-lernen.com/learn-german-online/beginners/lesson_3.php