



Vel Tech

Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)

OFFICE OF CONTROLLER OF EXAMINATIONS

**ACADEMIC YEAR
2020 – 2021**

ANNUAL REPORT

1.0 INTRODUCTION

Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology has successfully implemented the framework for outcome based education and is practicing it in every letter and spirit. The choice based credit system was introduced in 2015 and since then the proper alignment of the assessment process with the learning outcomes has always been ensured. The question papers are set based on Blooms Taxonomy with the levels of course outcome mentioned by the side of questions. Proper rubrics are also in force for consistent and reliable evaluation of students laboratory/project works etc.,The institution permits the transfer of credits for the courses undergone by our students in Universities abroad as well as the credits earned through SWAYAM - NPTEL courses.

2.0 PROCEDURES AND PROCESSES

The end semester examination schedule is published in the academic calendar and is strictly followed. The results are published within 15 days for the UG examinations and 21 days for the PG examinations. The services of external examiners from reputed institutions are utilized for question paper setting, evaluation in addition to the internal teaching faculties. To increase the transparency in the evaluation process, photocopy of the answer booklet is also given the students and the option to re-evaluation / challenge evaluation is also provided.

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A fully computerized examination management system is available in the institution. An automatic dummy number allotment and scanning machine is used for the secure management of dummy numbering process and also to scan the evaluated marks. Various processes like generation of seat numbers, hall ticket printing, students' performance tracking, results declaration etc., are done through state of the art computer software systems.

Four numbers of continuous internal assessments are conducted in addition to the end semester examination, with the ratio of internal to external evaluation fixed at 40:60. The institute has adopted modern technology-based systems to smoothen the examination related processes and to enhance security and integrity.

Around 50% of the question papers are sourced from the external experts from high ranking institutions. Utmost care is taken to design effective question papers that are properly worded using the action words pertaining to the appropriate levels of Blooms Taxonomy. Periodic audit/scrutiny of question papers were also conducted by external as well as internal experts to ensure the correctness and relevance to the syllabus.



The institution permits the transfer of credits for the courses undergone by our students in Universities abroad as well as the credits earned through SWAYAM - NPTEL courses. Our institute adopts absolute grading system for the examinations.

A one-time on-demand exam is permitted for the student, who has successfully completed all the courses mandated for the degree programme, except only one arrear course, upon clearing which he/she is eligible to earn a degree. The student will be allowed to take the exam only after the production of a valid appointment order for the job.

The evaluation of answer booklets commence with the assignment of dummy numbers to the answer booklets using an automatic dummy numbering machine and scanner. The answer scripts are also shuffled to increase the randomness. Examiners with suitable experience are called for evaluation duty, with the ratio of internal to external being 60:40. A double check system to verify the awarded marks is practiced by verifying the marks entered by the examiner in software with that of the scanned marks using the OCR. All UG papers are subjected to single evaluation, whereas PG and Ph.D papers are doubly evaluated to ensure correctness.

3.0 Moderation

Moderation is provided for all the regular examinations of the institution, based on the feedback received from the Deans / HoDs regarding the complexity of the question paper and also using the standard procedure of grafting and gracing.

4.0 Technology Adoption

A fully computerized examination management system is available in the institution. An automatic dummy number allotment and scanning machine is used for the secure management of dummy numbering process and also to scan the evaluated marks. Various processes like generation of seat numbers, hall ticket printing, students performance tracking, results declaration etc., are done through state of the art computer software systems.

5.0 Security and exam malpractice prevention

The answer booklets/grade cards have security features built in including Guilloche background with rainbow, barcode, opaque text(watermark), security border, void copy, invisible ink, MICR coding, thermo-chromatic ink and micro line printing. Automatic dummy numbering of the answer booklets is also enforced to improve the confidentiality and to protect the identity of the students. To prevent the malpractice during examinations, suitable number of monitoring squads comprising of faculties are constituted to monitor and enforce discipline in the examination halls.



6.0 Evaluation - Objective alignment :Programme/Course

The questions are set based on the level of the course outcome, e.g.,CO1, CO2, CO3,CO4 etc.,.The course outcomes are always monitored rigorously at the end of every semester for the courses.

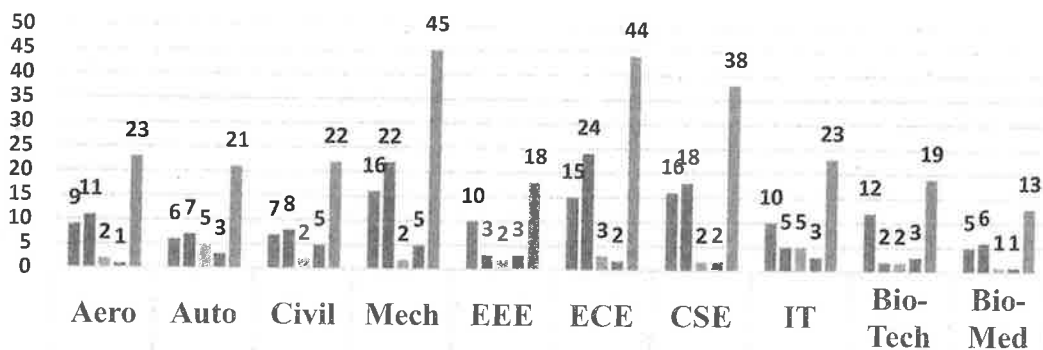


7.0 RESULT ANALYSIS NOV / DEC – 2020 EXAMINATIONS

B.TECH. - TOTAL NUMBER OF COURSES FOR WHICH THE EXAMS ARE CONDUCTED

Course	Aero	Auto	Civil	Mech	EEE	ECE	CSE	IT	Bio-Tech	Bio-Med
Programme Core	9	6	7	16	10	15	16	10	12	5
Programme Elective	11	7	8	22	3	24	18	5	2	6
Allied Elective	2	5	2	2	2	3	2	5	2	1
Institute Elective	1	3	5	5	3	2	2	3	3	1
Total	23	21	22	45	18	44	38	23	19	13
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EXAM CONDUCTED COURSE CATEGORY



	Aero	Auto	Civil	Mech	EEE	ECE	CSE	IT	Bio-Tech	Bio-Med
Programme Core	9	6	7	16	10	15	16	10	12	5
Programme Elective	11	7	8	22	3	24	18	5	2	6
Allied Elective	2	5	2	2	2	3	2	5	2	1
Institute Elective	1	3	5	5	3	2	2	3	3	1
Total	23	21	22	45	18	44	38	23	19	13



STUDENTS PASS DETAILS (B.TECH.)

Programme Name	Semester	Student Count	All Clear Count	%
B.Tech. - Aeronautical Engineering	3 rd	79	51	64.56
	5 th	88	60	68.18
	7 th	75	57	76.00
B.Tech. - Automobile Engineering	3 rd	55	42	76.36
	5 th	26	17	65.38
	7 th	45	35	77.78
B.Tech. - Biomedical Engineering	3 rd	9	6	66.67
	5 th	32	28	87.50
	7 th	26	18	69.23
B.Tech. - Biotechnology	3 rd	26	23	88.46
	5 th	14	14	100.00
	7 th	33	29	87.88
B.Tech. - Civil Engineering	3 rd	88	58	65.91
	5 th	73	41	56.16
	7 th	91	70	76.92
B.Tech. - Computer Science & Engineering	3 rd	1139	930	81.65
	5 th	907	771	85.01
	7 th	841	720	85.61
B.Tech. - Electronics & Communication Engineering	3 rd	690	567	82.17
	5 th	491	384	78.21
	7 th	492	309	62.80
B.Tech. - Electrical and Electronics Engineering	3 rd	65	35	53.85
	5 th	48	37	77.08
	7 th	43	35	81.40
B.Tech. - Information Technology	3 rd	65	51	78.46
	5 th	55	42	76.36
	7 th	55	38	69.09
B.Tech. - Mechanical Engineering	3 rd	241	191	79.25
	5 th	247	211	85.43
	7 th	321	258	80.37



ARTS, SCIENCE AND LAW PROGRAMMES

Programme Name	Semester	Student Count	All Clear Count	%
B.A. L.L.B (Hons.)	1	72	31	43.06
	3	46	42	91.30
	5	23	23	100.00
B.Com.	1	121	89	73.55
	3	57	43	75.44
	5	88	58	65.91
B.Com. L.L.B (Hons.)	1	60	35	58.33
	3	32	30	93.75
	5	4	4	100.00
B.B.A.	1	28	13	46.43
	3	31	23	74.19
	5	25	21	84.00
B.Sc. - Multimedia	1	11	7	63.64
	3	20	15	75.00
	5	7	5	71.43
B.Sc. - Visual Communication	1	17	13	76.47
	3	15	9	60.00
	5	14	1	7.14



M.TECH., M.Sc., M.B.A., M.A. DEGREE PROGRAMMES

Programme Name	Semester	Student Count	All Clear Count	%
M.Tech. - Aeronautical Engineering	1	4	1	25
	3	2	2	100
M.Tech. - Automobile Engineering	1	16	14	87.5
	3	24	24	100
M.Tech. - Big Data Analytics	1	2	1	50
	3	3	1	33.3
M.Tech. - CAD/CAM	1	7	7	100
	3	1	1	100
M.Tech. - Thermal Engineering	1	1	0	0
	3	8	8	100
M.Tech. - Structural Engineering	1	5	4	80
	3	11	8	72.7
M.Tech. - Power Electronics	1	13	9	69.2
	3	5	5	100
M.Tech. - Network Engineering	1	4	0	0
	3	1	1	100
M.Tech. - Metallurgical and Material Science Engineering	1	9	5	55.6
	3	5	5	100
M.Tech. - Machine Design	1	1	1	100
	3	5	5	100
M.Tech. - Information and Cyber Security	1	5	3	60
	3	2	0	0
M.Tech. - Industrial Safety and Engineering	1	18	10	55.6
	3	13	10	76.9
M.Tech. - Industrial Engineering	1	8	7	87.5
	3	7	6	85.7
M.Tech. - Geotechnical Engineering	1	5	4	80
	3	5	5	100
M.Tech. - Environmental Engineering	1	6	5	83.3
	3	3	3	100
M.Tech. - Embedded Systems	1	4	2	50
	3	6	3	50
M.Tech. - Computer Science and Engineering	1	4	4	100
	3	2	2	100
M.Tech. - Construction Engineering and Management	1	2	2	100
	3	5	2	40
M.Tech. - Robotics	3	1	0	0
M.Sc. - Chemistry	1	29	23	79.3
	3	3	3	100
M.Sc. - Physics	1	20	10	50
	3	1	1	100
M.B.A.	1	73	35	47.9
	3	55	42	76.4
M.Sc. - Data Analytics	1	1	1	100
M.A. - English	1	8	8	100



Result Analysis May – 2021 Examinations
B.TECH. - TOTAL NUMBER OF COURSES FOR WHICH THE EXAMS ARE CONDUCTED

Course	AERO	AUTO	BIO-MED	BIO-TECH	CIVIL	CSE	ECE	EEE	IT	MECH
Foundation	22									
Programme Core	20	15	15	12	12	22	23	14	13	22
Programme Elective	13	6	4	5	8	24	31	5	9	25
Allied Elective	1	6	2	2	1	2	5	3	8	2
Institute Elective	3	4	1	1	5	3	3	5	7	7
Total	37	31	22	20	26	51	62	27	37	56
	391									

STUDENTS PASS DETAILS (B.TECH.)

Programme Name	Semester	Student Count	All Clear Count	%
B.Tech. - Aeronautical Engineering	2 nd	45	34	75.56
	4 th	80	52	65.00
	6 th	88	69	78.41
	8 th	74	65	87.84
B.Tech. - Automobile Engineering	2 nd	10	4	40
	4 th	55	39	70.91
	6 th	26	17	65.38
	8 th	43	40	93.02
B.Tech. - Biomedical Engineering	2 nd	20	18	90
	4 th	10	6	60.00
	6 th	32	20	62.50
	8 th	26	19	73.08



Programme Name	Semester	Student Count	All Clear Count	%
B.Tech. - Biotechnology	2 nd	38	34	89.47
	4 th	26	19	73.08
	6 th	14	14	100.00
	8 th	33	31	93.94
B.Tech. - Civil Engineering	2 nd	50	30	60
	4 th	88	55	62.50
	6 th	73	51	69.86
	8 th	87	75	86.21
B.Tech. - Computer Science and Engineering	2 nd	1042	809	77.64
	4 th	1133	926	81.73
	6 th	905	777	85.86
	8 th	840	786	93.57
B.Tech. - Electronics & Communication Engineering	2 nd	366	293	80.05
	4 th	690	517	74.93
	6 th	491	412	83.91
	8 th	485	437	90.10
B.Tech. - Electrical and Electronics Engineering	2 nd	30	20	66.67
	4 th	65	44	67.69
	6 th	48	40	83.33
	8 th	41	38	92.68



Programme Name	Semester	Student Count	All Clear Count	%
B.Tech. - Information Technology	2 nd	48	39	81.25
	4 th	65	48	73.85
	6 th	55	49	89.09
	8 th	54	46	85.19
B.Tech. - Mechanical Engineering	2 nd	71	40	56.34
	4 th	241	158	65.56
	6 th	247	203	82.19
	8 th	317	287	90.54

ARTS, SCIENCE AND LAW PROGRAMMES

Programme Name	Semester	Student Count	All Clear Count	%
B.A LL.B.(Hons)	2 nd	77	58	75.32
	4 th	46	37	80.43
	6 th	24	24	100
B.Com LL.B.(Hons)	2 nd	59	53	89.83
	4 th	32	29	90.63
	6 th	4	4	100



Programme Name	Semester	Student Count	All Clear Count	%
B.Com.	2 nd	118	84	71.19
	4 th	59	45	76.27
	6 th	83	60	72.29
B.B.A.	2 nd	25	21	84
	4 th	31	25	80.65
	6 th	24	20	83.33
B.Sc. - Multimedia	2 nd	7	6	85.71
	4 th	18	10	55.56
	6 th	6	6	100
B.Sc. - Visual Communication	2 nd	17	11	64.71
	4 th	15	3	20
	6 th	13	7	53.85



M.TECH., M.Sc., M.B.A., M.A. DEGREE PROGRAMMES

Programme Name	Semester	Student Count	All Clear Count	%
M.Tech. - Aeronautical Engineering	2 nd	3	2	66.67
	4 th	2	2	100
M.Tech. - Automobile Engineering	2 nd	16	16	100
	4 th	17	17	100
M.Tech. - Big Data Analytics	2 nd	3	2	66.67
	4 th	3	2	66.67
M.Tech. - CAD/CAM	2 nd	8	8	100
	4 th	1	1	100
M.Tech. - Thermal Engineering	2 nd	1	0	0
	4 th	8	8	100
M.Tech. - Structural Engineering	2 nd	5	3	60
	4 th	11	11	100
M.Tech. - Power Electronics	2 nd	12	11	91.67
	4 th	5	5	100
M.Tech. - Network Engineering	2 nd	3	0	0
	4 th	1	1	100
M.Tech. - Metallurgical and Material Science Engineering	2 nd	9	9	100
	4 th	5	5	100
M.Tech. - Machine Design	2 nd	1	1	100
	4 th	5	5	100
M.Tech. - Information and Cyber Security	2 nd	5	5	100
	4 th	1	1	100

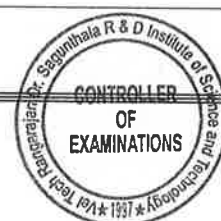


Programme Name	Semester	Student Count	All Clear Count	%
M.Tech. - Industrial Safety and Engineering	2 nd	18	13	72.22
	4 th	12	11	91.67
M.Tech. - Industrial Engineering	2 nd	5	4	80
	4 th	7	7	100
M.Tech. - Geotechnical Engineering	2 nd	5	2	40
	4 th	5	5	100
M.Tech. - Environmental Engineering	2 nd	5	4	80
	4 th	3	3	100
M.Tech. - Embedded Systems and Technologies	2 nd	4	3	75
	4 th	6	5	83.33
M.Tech. - Computer Science and Engineering	2 nd	3	3	100
	4 th	2	2	100
M.Tech. - Construction Engineering and Management	2 nd	2	2	100
	4 th	4	4	100
M.Tech. - Robotics	4 th	1	1	100
M.Sc. - Chemistry	2 nd	28	27	96.43
	4 th	3	3	100
M.Sc. - Physics	2 nd	15	14	93.33
	4 th	1	1	100
M.B.A.	2 nd	68	54	79.41
	4 th	55	50	90.91
M.Sc. - Data Analytics	2 nd	1	0	0
M.A. - Maths	2 nd	15	13	86.67
M.A. - English	2 nd	8	6	75



GRADUATION LIST
Academic Year 2020-2021
(Date of Convocation: 6.11.2021 & 7.11.2021,
Old Batches: 377, Ph.D : 39 & Current Batches: 2124)

Program Code	Programme Name	Number of students appeared in the final year examination	Number of students passed in the final year examination
UEAE	B.Tech. - Aeronautical Engineering	73	68
UEAU	B.Tech. - Automobile Engineering	43	40
UECS	B.Tech. - Computer Science and Engineering	840	801
UECE	B.Tech. - Civil Engineering	87	76
UEEE	B.Tech. - Electronics & Communication Engineering	485	447
UEEE	B.Tech. - Electrical and Electronics Engineering	41	41
UEME	B.Tech. - Mechanical Engineering	317	291
UEIT	B.Tech. - Information Technology	54	41
UEBT	B.Tech. - Biotechnology	33	30
UEBM	B.Tech. - Biomedical Engineering	26	23
UABC	B.Com.	83	78
UABB	B.B.A.	24	23
USMT	B.Sc. - Multimedia	6	6
USVC	B.Sc. - Visual Communication	7	2
PSCH	M.Sc. - Chemistry	3	3
PSPY	M.Sc. - Physics	1	1
PEAE	M.Tech. - Aeronautical Engineering (Unmanned Aerial Vehicles)	2	2
PEAU	M.Tech. - Automobile Engineering	24	24
PEBD	M.Tech. - Big Data Analytics	3	2
PECC	M.Tech. - CAD/CAM	1	1
PECE	M.Tech. - Construction Engineering and Management	4	4

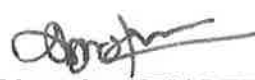


PECS	M.Tech. - Computer Science and Engineering	2	2
PEES	M.Tech. - Embedded Systems and Technologies	6	4
PEEN	M.Tech. - Environmental Engineering	3	3
PEGE	M.Tech. - Geotechnical Engineering	5	5
PEIE	M.Tech. - Industrial Engineering	7	7
PEIS	M.Tech. - Industrial Safety and Engineering	12	11
PEIN	M.Tech. - Information and Cyber Security	1	1
PEMD	M.Tech. - Machine Design	5	5
PEMM	M.Tech. - Metallurgical and Material Science Engineering	5	5
PENE	M.Tech. - Network Engineering	1	1
PEPE	M.Tech. - Power Electronics	5	5
PERO	M.Tech. - Robotics	1	1
PEST	M.Tech. - Structural Engineering	11	11
PETE	M.Tech. - Thermal Engineering	8	8
PAMG	M.B.A.	55	51
Total		2284	2124

D. 

Total number of final year students who passed in the university examination	2124
Total number of final year students who appeared for the examination	2284
Percentage	92.99%




CONTROLLER OF EXAMINATIONS
