

The Annual Quality Assurance Report (AQAR) of the IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. (Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013)

Subject : AQAR Report for the period from July 1, 2016 to June 30, 2017.

Part – A

I. Details of the Institution

1.1 Name of the Institution	VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES (VISTAS) (Deemed to be University U/s 3 of the UGC Act, 1956)
1.2 Address Line 1	Velan Nagar, P.V.Vaithialingam Road
Address Line 2	Pallavaram
City/Town	Chennai
State	Tamil Nadu
Pin Code	600 117
Institution e-mail address	vistas@velsuniv.ac.in
Contact Nos.	044 22662500
Name of the Head of the Institution:	Vice-Chancellor : Dr.V.Thamizh Arasan
Tel. No. with STD Code:	044 22662501

Mobile:

Name of the IQAC Co-ordinator:

Mobile:

IQAC e-mail address:

1.3 NAAC Track ID (For ex. MHCOGN 18879)

1.4 NAAC Executive Committee No. & Date:
(For Example EC/32/A&A/143 dated 3-5-2004.
This EC no. is available in the right corner- bottom
of your institution's Accreditation Certificate)

1.5 Website address:

Web-link of the AQAR:

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	B	2.58	2015	5 years
2	2 nd Cycle				
3	3 rd Cycle				
4	4 th Cycle				

1.7 Date of Establishment of IQAC : DD/MM/YYYY

1.8 AQAR for the year (for example 2010-11)

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11 submitted to NAAC on 12-10-2011)

The Certificate of Accreditation, after the First Cycle of Assessment by NAAC, is dated 16.11. 2015

i. AQAR 2015-2016 submitted to NAAC on 23.03.2017

ii. AQAR _____ Nil _____ (DD/MM/YYYY)

iii. AQAR _____ Nil _____ (DD/MM/YYYY)

1.10 Institutional Status

University State Central Deemed Private

Affiliated College Yes No

Constituent College Yes No

Autonomous college of UGC Yes No

Regulatory Agency approved Institution Yes No

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education Men Women

Urban Rural Tribal

Financial Status Grant-in-aid UGC 2(f) UGC 12B

Grant-in-aid + Self Financing Totally Self-financing

1.11 Type of Faculty/Programme

Arts Science Commerce Law PEI (Phys Edu)

TEI (Edu) Engineering Health Science Management

Others (Specify)

Maritime Studies, Hotel & Catering Mgmt, Mass
Communication and Music & Fine Arts

1.12 Name of the Affiliating University (for the Colleges)

Not Applicable

1.13 Special status conferred by Central/ State Government - UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University	<input type="text" value="-"/>		
University with Potential for Excellence	<input type="text" value="-"/>	UGC-CPE	<input type="text" value="-"/>
DST Star Scheme	<input type="text" value="-"/>	UGC-CE	<input type="text" value="-"/>
UGC-Special Assistance Programme	<input type="text" value="-"/>	DST-FIST	<input type="text" value="-"/>
UGC-Innovative PG programmes	<input type="text" value="-"/>	Any other (<i>Specify</i>)	<input type="text" value="-"/>
UGC-COP Programmes	<input type="text" value="-"/>		

2. IQAC Composition and Activities

2.1 No. of Teachers	<input type="text" value="7"/>
2.2 No. of Administrative/Technical staff	<input type="text" value="3"/>
2.3 No. of students	<input type="text" value="1"/>
2.4 No. of Management representatives	<input type="text" value="1"/>
2.5 No. of Alumni	<input type="text" value="1"/>
2.6 No. of any other stakeholder and community representatives	<input type="text" value="1"/>
2.7 No. of Employers/ Industrialists	<input type="text" value="1"/>
2.8 No. of other External Experts	<input type="text" value="1"/>
2.9 Total No. of members	<input type="text" value="16"/>
2.10 No. of IQAC meetings held : 2	

2.11 No. of meetings with various stakeholders: No. Faculty

Non-Teaching Staff Students Alumni Others

2.12 Has IQAC received any funding from UGC during the year? Yes No

If yes, mention the amount

2.13 Seminars and Conferences

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. International National State Institution Level

(ii) Themes

Analytical Techniques in Chemistry (GC, HPLC, HPTLC & FT-IR), Biomaterials from Micro Organism and Medicinal Plants for Human Welfare, Environment, Food safety and Predictive Modelling, Immunology Laboratory Techniques Using Fish Model, Nutraceuticals in disease Management, Current Research in Computational Biology & Life Sciences, Cloud computing, Business Strategy Simulation, Modern Approaches in Drug Discovery, Nano formulations and Pharmacokinetics, Bio-inspired Computational Methods for Disease Prediction and Management of Lifestyle diseases, Recent Trends in Biotechnology and its Application, Business Analytics and Virtualization, Automation in Electrical System, Solar Photovoltaic system Design, Environment Protection in 21st Century – Socio, Economic and Legal Perspectives, Environmental Laws : Contemporary issues and challenges , Recent Trends in ShipBuilding and Oil & Gas Industries, Emerging Trends in Engineering Research, HF Rader Technology, Innovation and Sustainability in Business and Management, Emerging Trends in Nano World, Knowledge Discovery and Computational Intelligence, Pedagogy and Research Methodology.

2.14 Significant Activities and contributions made by IQAC

All the above said activities relating to improvement in quality are planned, monitored and executed through IQAC. The expenditure is approved by IQAC.

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality Enhancement and the outcome achieved by the end of the year *

Plan of Action	Achievements
Remedial class for slow learners	Improvement in Pass percentage
Soft skill developments classes for the II and III year students	Improvement in placement percentage.
Journal paper presentation by the PG students	Research knowledge of the students has been improved
Consultancy services	Research consultancy work has been carried out
Establishing a system for collection of data related to AQAR from the departments.	Established the system for collection data – all the departments are requested to send the monthly data through ERP to the Central cell of IQAC.
E.Platform and Online courses	The university is privileged to have INFLIBNET, e.learning platform, digital resources including resources of NTPEL, Edx, Coursera, Khan Academy, TED DELNET, SWAYAM, Shodhganga, e-Shodhsindhu, NDL, etc.,
More no. of ICT enabled Classroom	10 additional Smart class rooms have been established during this period.
To Strengthen the Alumni Association	Alumni association have been strengthened by electing a new body of office bearers and conducting more activities through alumni association.
Strengthening of PG and Research Lab	14 Labs have been created and Rs.57,75,299 worth of lab equipment have been added.
Improve Industry-Institute Linkage	Industry Institute Cell set up. More Technical talks, Guest Lectures, IVs, more involvement of industry through Departmental IQACs & Board of Studies Meetings.

* Attach the Academic Calendar of the year as Annexure.

ANNEXURE – I

2.15 Whether the AQAR was placed in statutory body Yes No

Management Syndicate Any other body Academic Council

Provide the details of the action taken

S.No.	Plan & Actions at the beginning of the year	Action Taken
1	To Plan the events for Academic Calendar (2016-2017)	Each department has been asked to prepare and submit academic action plan consisting of regular teaching activities, conference and seminars, industrial visits, field visits, MoUs to be signed and any other programs for extension activities. All HODs have submitted their academic action plan.
2.	FDP program at University Level	<p>The following FDPs have been organized at University and Department Level.</p> <ul style="list-style-type: none"> • One Day FDP in Oracle • Two days FDP on Business Strategy Simulation in association with ICT ACT, Tamil Nadu. • Faculty Development Program on Structural Equation Modelling and Preparation of Project Proposal for funding. • Three days Faculty Development Program on “Student Concentric Pedagogy” • Two days FDP workshop on Stress Management <p>Permitted to attend FDP organized by other institutions.</p>
3.	Budget for (2016-2017)	The HODS have been asked to prepare budget for the Department and then consolidated budget for the schools as a whole. The budget has been refined in such a way it contains information on recurring and non-recurring expenditures, expenditures on research, expenditure on publications etc., Rs.3,22,51,000/- have been earmarked for the university and this amount excludes salary, and expenditure on permanent asset improvements.
4	Establishing an agencies to prepare the students for competitive examinations	MoU has been signed with Bharathidasan IAS Academy to offer coaching for the interested students with in the campus.
5	To include Life Skill Courses for all Students	Yoga is provided to the students through World Community Centre and for others Life skill courses on e.platform namely MOOC (SWAYAM).

Part – B

Criterion – I

I. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	24	-	-	-
PG	50	-	-	-
UG	42	-	-	-
PG Diploma	1	-	-	2
Advanced Diploma	-	-	-	-
Diploma	6	-	-	4
Certificate	5	-	-	6
Others (M.Phil.,)	13	-	-	-
Total	141	-	-	-
Interdisciplinary	06	-	-	-
Innovative	16	-	-	-

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options

The university has adopted CBCS for all the programs of study with sufficient elective options, thus, providing the required flexibility in the curriculum.

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	90%
Trimester	NIL
Annual	10%

1.3 Feedback from stakeholders* Alumni Parents Employers Students
(On all aspects)

Mode of feedback : Online Manual Co-operating schools (for PEI)

**Please provide an analysis of the feedback in the Annexure*

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

Yes, syllabi revised for 21 degree programmes during 2016-2017.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

The following new Department / centre introduced during 2016-2017.

1. Department of Economics
2. Department of Education
3. Department of Aviation
4. Department of Music & Fine Arts
5. Centre of Excellence for Energy and Alternative fuels
6. Centre of Excellence in Automation and Energy Conservation
7. Central Instrumentation Centre (Work is ongoing)

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
532	403	58	47	24

2.2 No. of permanent faculty with Ph.D.

176

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
122	-	14	-	8	-	-	-	144	-

2.4 No. of Guest and Visiting faculty and Temporary faculty

3

18

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/ Workshops	14	80	25
Presented papers	121	102	11
Resource Persons	10	6	6

2.6 Innovative processes adopted by the institution in Teaching and Learning:

- The Teaching learning process has been enriched by introducing ICT enabled class rooms, Wi-Fi campus, e.learning platform, Vels Library Subject Gateway, Video lectures and Smart Class rooms.
- The University has installed Language Laboratory, SAP Laboratory, E.learning platform and has a Foreign Language Centre for the advanced learners.
- Focusing on the needs of the student, the learning process is made student-centric focusing on LMS, KMS and EMS.
- Innovation in teaching is a combination of Teacher, Taught and Technology. All these three must go hand in hand to create conducive climate for innovative learning. The teachers initiate innovative pedagogies, the taught initiates and innovates self-learning shared teaching learning and peer evaluation strategies. The technology such as Smart Class rooms, Mobile learning, Webinars, social networks help in enhancing the teaching learning process.
- Learners–centered activity like participative learning, interactive learning, collaborative learning, blended learning and experimental learning are practiced through students seminars, case studies, assignments, project work, problems solving exercises, and field works and industrial visits. Common sources like NPTEL, E- Learning and other platforms available for teaching and learning process are utilized for student.
- The Internet connections are available in all the departments and 27 smart class rooms and 81 LCD projectors are also made available.
- The university is privileged to have INFLIBNET, e.learning platform, digital resources including resources of NPTEL, Edx, Coursera, Khan Academy, TED DELNET, Shodhganga, e-Shodhsindhu, NDL, etc.,
- Providing orientations and indulging faculties and students to take part in resources under MHRD guidelines such as – INFLIBNET – e-PG Pathsala, e-ShodhSindhu, Shodhganga, NPTEL, National Digital Library (NDL), CEC and SWAYAM.
- The subject gateway portal which is designed and developed by the library holds resources such as e-Journals, e-Books, Repositories, etc. Resources provided by e.PG Pathsala, SWAYAM, NDL and CEC can be access remotely anywhere at any time, also, e-Journals form EBSCO database can be access outside the campus via app in android devices.
- Use of ICT has become integral part of “Teaching-Learning” process of the university. Nearly 85% of the faculty use technology based teaching as per the recommendation of IQAC. Virtual learning is enabled by the IIT(M) and IIT(K) under the nodal program.
- These are planned and executed on the supervision of IQAC and teachers are motivated and trained by the IQAC to follow all the above said.

2.7 Total No. of actual teaching days during this academic year 185(excluding examination days)

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions) Bar Coding, Double Valuation for PG, Photocopy on demand.

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop 312

2.10 Average percentage of attendance of students 82%

2.11 Course/Programme wise distribution of pass percentage : 2016-17

S.No	Title of the Programme	No. of Students Appeared	Distinction %	I Class %	II Class %	III Class %	Pass %
1	BBA	103	0.97	21.36	38.83	0	61.17
2	MA ENGLISH	31	0.00	80.65	19.35	0	100.00
3	B.COM (ACCOUNTS AND FINANCE)	166	3.61	48.80	21.08	0	73.49
4	B.COM (COMPUTER APPLICATION)	67	1.49	46.27	16.42	0	64.18
5	B.SC. NAUTICAL SCIENCE	30	63.33	30.00	0.00	0	93.33
6	BCA	164	10.98	55.49	15.85	0.61	82.93
7	B.Sc. INFORMATION TECHNOLOGY	54	22.22	27.78	0.00	0.00	50.00
8	M.Sc. INFORMATION TECHNOLOGY	19	36.84	57.89	0.00	0.00	94.74
10	MCA	29	48.28	41.38	0.00	0.00	89.66
11	B.Sc. COMPUTER SCIENCE	134	14.93	39.55	3.73	0.00	58.21
12	M.Sc. COMPUTER SCIENCE	8	37.50	62.50	0.00	0.00	100.00
13	B.Sc. BIOTECHNOLOGY	62	16.13	46.77	8.06	0.00	70.97
14	M.Sc. BIO-TECHNOLOGY	11	36.36	63.64	0.00	0.00	100.00
15	M.Sc. APPLIED MEDICAL BIOTECH AND CLINICAL RESEARCH	10	30.00	50.00	0.00	0.00	80.00
16	B.Sc. VISUAL COMMUNICATION	61	22.95	47.54	0.00	0.00	70.49
17	B.Sc. ANIMATION	46	41.30	36.96	2.17	0.00	80.43
18	M.Sc .ANIMATION	9	88.89	0.00	0.00	0.00	88.89

19	MA FILM AND TELEVISION PRODUCTION	1	0.00	100.00	0.00	0.00	100.00
20	B.Sc. HOTEL AND CATERING MANAGEMENT	75	4.00	53.33	8.00	0.00	65.33
21	M.Sc. HOTEL AND CATERING MANAGEMENT	10	20.00	20.00	0.00	0.00	40.00
22	B.Sc. BIOCOMPUTING	26	30.77	38.46	0.00	0.00	69.23
23	B.Sc. BIOCHEMISTRY	46	34.78	26.09	0.00	0.00	60.87
24	M.Sc. BIOCHEMISTRY	12	41.67	50.00	0.00	0.00	91.67
25	B.Sc. MICROBIOLOGY	25	8.00	64.00	0.00	0.00	72.00
26	M.Sc. IMMUNOLOGY AND MICROBIOLOGY	14	28.57	71.43	0.00	0.00	100.00
27	B.Sc. CHEMISTRY	35	28.57	31.43	2.86	0.00	62.86
28	M.Sc. CHEMISTRY	13	7.69	30.77	0.00	0.00	38.46
29	M.Sc. PHARMACEUTICAL & ANALYTICAL CHEMISTRY	6	0.00	100.00	0.00	0.00	100.00
30	M.Sc. ORGANIC CHEMISTRY	9	11.11	33.33	0.00	0.00	44.44
31	M.Sc. NANO SCIENCE	1	0.00	100.00	0.00	0.00	100.00
32	B.PHARM	95	18.95	54.74	15.79	0.00	89.47
33	M.PHARM PHARMACEUTICS	2	50.00	50.00	0.00	0.00	100.00
34	M.PHARM PHARMACY PRACTICE	2	0.00	100.00	0.00	0.00	100.00
35	PHARM D	28	39.29	57.14	0.00	0.00	96.43
36	PHARM D (PB)	2	100.00	0.00	0.00	0.00	100.00
37	B.P.T	34	0.00	35.29	32.35	8.82	76.47
38	M.P.T	2	0.00	50.00	50.00	0.00	100.00
39	B.E. MARINE ENGINEERING	21	28.57	57.14	0.00	0.00	85.71
40	B.E. COMPUTER SCIENCE AND ENGINEERING	61	11.48	42.62	16.39	0.00	70.49
41	M.E. COMPUTER SCIENCE ENGINEERING	11	36.36	27.27	0.00	0.00	63.64
42	B.E. ELECTRONICS AND COMMUNICATION ENGINEERING	44	9.09	43.18	29.55	0.00	81.82
43	M.E. COMMUNICATION SYSTEMS	5	80.00	20.00	0.00	0.00	100.00
44	B.E. MECHANICAL ENGINEERING	129	10.85	72.09	0.78	0.00	83.72
45	B.E. MECHANICAL ENGINEERING (CALENDAR YEAR COURSE)	3	33.33	33.33	0.00	0.00	66.67
46	M.E. COMPUTER INTEGRATED MANUFACTURING	3	0.00	100.00	0.00	0.00	100.00

47	B.E. AUTOMOBILE ENGINEERING	18	5.56	38.89	0.00	0.00	44.44
48	M.E. AUTOMOBILE ENGINEERING	3	100.00	0.00	0.00	0.00	100.00
49	B.E. CIVIL ENGINEERING	48	12.50	29.17	18.75	0.00	60.42
50	M.E. CONSTRUCTION ENGINEERING AND MANAGEMENT	6	50.00	50.00	0.00	0.00	100.00
51	B.E. ELECTRICAL AND ELECTRONICS ENGINEERING	27	14.81	55.56	18.52	0.00	88.89
52	M.E. POWER ELECTRONICS AND DRIVES	2	50.00	50.00	0.00	0.00	100.00
53	M.B.A. GENERAL	48	6.25	77.08	10.42	0.00	93.75
54	M.B.A. LOGISTICS AND SHIPPING MANAGEMENT	74	13.51	77.03	4.05	0.00	94.59
55	M.B.A. LOGISTICS AND SUPPLY CHAIN MANAGEMENT	62	11.29	79.03	3.23	0.00	93.55
56	M.B.A TOURISM & HOSPITALITY	4	-	-	-	-	-
57	M.B.A. FINANCE AND BUSINESS ANALYTICS	4	0.00	75.00	25.00	0.00	100.00
58	B.B.M	10	10.00	50	20.00	0.00	80.00

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

- The student feedback system, peer review, academic audit and self-appraisal enabled the university to maintain quality of Teaching Learning and Evaluation.
- The academic audit is conducted once in 6 months. Based on the suggestions received from External Academic Auditors, the feedback from the faculty teaching the concerned subject and the students, feedback from students, the Curriculum & Syllabi are improved during the subsequent meeting of the BoS. The activities are put under strict compliances of time and quality.
- The university has a credible evaluation system of teachers to foster teachers' quality and promote professional development.
- The university obtains Feedback from the students about the performance of teachers in each of the course offered.
- Students are asked to evaluate the qualities of teachers' interims of their overall performance in the class room, their behaviour towards students and regularity of attendance.
- The students are also asked to give their feedback on completion of syllabus, pace of completion, promptness and impartial evaluation of answer scripts.

- The self-appraisal of teachers and peer review also help the management to evaluate the teachers. All these are planned and executed under the effective monitoring of IQAC.
- The feedback received is analysed by IQAC and the outcome is communicated to the teachers through HODs / Directors.
- The outcome of all feedback is not used for punitive action, but for professional development of the teachers. If the teacher fails to improve even after repeated gentle reminders, there is provision to initiate disciplinary action.
- The students are duly kept informed about the structure of the examinations, continuous assessment, tutorials, dates of end semester examination, continuous assessment examinations and practical examinations, these are included in the academic calendar of the university.

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	300
UGC – Faculty Improvement Programme(attended)	1
HRD programmes	3
Orientation programmes	150
Faculty exchange programme	18
Staff training conducted by the university	852
Staff training conducted by other institutions	647
Summer / Winter schools, Workshops, etc.	5
Others	

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	252	-	31	124*
Technical Staff	58	-	4	-

*** Outsourced**

Criterion – III

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

- All research activities in the university are strictly monitored by IQAC and facilitated with appropriate guidance by various statutory committees such as Research Advisory Committee, Centre for Advanced Research Development Committee (CARD), Research Projects Review Committee and Publication Oversight Committee.
- Every year all publications of the University are made to adhere for Quality benchmarks like Impact factor , citation index , SNIP, SJR etc., of the journal and 'h' index of the authors using SCOPUS, Web of Science, Pub Med, EBSCO and Google-Scholar databases. All faculty members and students should submit the manuscripts for approval to Publication
- Oversight Committee is for screening it for originality and quality. The manuscripts are also screened for plagiarism through anti plagiarism software before submitting to journals.
- Starter seed money grant is given to 20 teachers in a year with a maximum grant of Rs 1 Lakh per faculty.
- The University has an in house IPR CELL and an IPR Consultant. The IPR CELL periodically arranges IPR sensitization seminars to create awareness among the faculty members, researchers and students about the importance of patenting the invention and also the method to transfer of technology.
- The University has instituted many research awards to encourage the faculty. Awards are given in various categories like Best Paper Publication, Guiding PhDs, Book Publication, Implementation of Major Projects,
- The university corresponds with nearby industries and introduces out experts and expertise to them to undertake consultancy services. The faculty members are encouraged to write proposals to state, central and international funding agencies throughout the year and whenever such proposals are invited by the agencies.

3.2 Details regarding major projects (July 2016 to June 2017)

	Completed	Ongoing	Sanctioned	Submitted
Number	3	7	7	50
Outlay in Rs. Lakhs	25,22,000	1,90,34,000	1,90,34,000	Rs.28.06 crores

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	-	7	7	-
Outlay in Rs. Lakhs	-	6,54,800	6,54,800	-

3.4 Details on research publications

	National & International	Others
Peer Review Journals	541	-
Non-Peer Review Journals	-	-
e-Journals	-	-
Conference proceedings	2	-

3.5 Details on Impact factor of publications:

Range 0.172-4.259 Average 1.97 h-index 4 Nos. in SCOPUS 382

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	3	Dept. of Ayush NMPB, New Delhi	14,11,900	14,11,900
	3	SRB EMR DST, New Delhi	36,00,000	36,00,000
	3	SERB, DST, New Delhi	25,07,390	25,07,390
	3	SRB EMR DST, New Delhi	32,00,000	32,00,000
	3	SERB, DST, New Delhi	23,22,100	23,22,100
	3	SERB, DST, New Delhi	30,00,000	30,00,000
	3	SERB-ECR, DST, New Delhi	30,00,000	30,00,000
Minor Projects	1	VISTAS	6,54,800	6,54,800
Interdisciplinary Projects	-	-	-	-
Industry sponsored(Consultancy)		Bombay hemp Company, Mumbai	13,50,000	13,50,000
Projects sponsored by the University/ College	1 year	-	-	-
Students research projects (other than compulsory by the University)	-	-	-	-
Any other(Specify)	-	-	-	-
Total			2,10,38,800	

3.7 No. of books published i) With ISBN No. Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP CAS DST-FIST
DPE DBT Scheme/funds

3.9 For colleges Autonomy CPE DBT Star Scheme
INSPIRE CE Any Other (specify)

3.10 Revenue generated through consultancy

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	6	11	-	-	-
Sponsoring agencies	0	0	0	0	0

3.12 No. of faculty served as experts, chairpersons or resource persons

3.13 No. of collaborations International National Any other

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs :

From Funding agency From Management of University/College

Total

3.16 No. of patents received this year

Type of Patent	Number	
National	Applied	8
	Granted	0
International	Applied	-
	Granted	-
Commercialised	Applied	1
	Granted	-

3.17 No. of research awards/ recognitions received by faculty and research fellows
Of the institute in the year

Total	International	National	State	University	Dist	College
15	-	3	12	-	-	-

3.18 No. of faculty from the Institution who are Ph. D. Guides and students registered under them

82
348

3.19 No. of Ph.D. awarded by faculty from the Institution

48

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF	13	SRF	-	Project Fellows	5	Any other	36
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3.21 No. of students Participated in NSS events:

University level	1225	State level	-
National level	-	International level	-

3.22 No. of students participated in NCC events:

University level	-	State level	-
National level	-	International level	-

3.23 No. of Awards won in NSS:

University level	-	State level	-
National level	-	International level	-

3.24 No. of Awards won in NCC:

University level	-	State level	-
National level	-	International level	-

3.25 No. of Extension activities organized

University forum	11	College forum	-		
NCC	-	NSS	10	Any other	-

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

The university sensitizes its faculty members and students on its Institutional Social Responsibilities to cater to the needs of people who are deprived of education. Because of this, most of faculty members and students know very well about the social and economic status of the people near the campus and so they volunteer to do social service to the people.

- ✓ The Faculty members and the students are encouraged to take part in collaboration with other organizations such as GOs, NGOs, SHGS, local bodies etc. in carrying out societal outreach programmes.

- ✓ Information concerning these programmes is circulated through notices and co-ordinators of NSS, Youth Red Cross and Heads of Departments.
- ✓ University appreciates the services provided by students and faculty by taking into consideration their working for such activities as on duty.
- ✓ Courses from the Schools of Pharmacy and Physiotherapy have extension activities incorporated as part of the field practices.
- ✓ Undergraduate and postgraduate students of Pharmacy and Physiotherapy are taken for field social work in the community as a part of their training.
- ✓ VISTAS has established a free Palliative Care Hospital for the old age people, which is the first of its kind in the part of the country.
- ✓ Several of the prominent contributions of University include:
 - Serving public through various awareness camp
 - Involvement in Government organized health care programmes
- ✓ The University encourages the Faculty, staff and students participate regularly in various health care programmes, flood relief, disease outbreaks and disaster management, Environmental awareness camp etc.
- ✓ Training programmes are routinely conducted at University on Public Health camp, Self Help group, Noise awareness, Breast cancer awareness etc
- ✓ The NSS of University with other departments spearheads community awareness on Pollution, Environmental, Occupational Health Impact, Digital payments, Swachh Bharat and cleanliness.
- ✓ NSS Unit of Vels University commemorated the “National Day for the mentally retarded persons” in fitting manner in association with Tambaram Parents Association for the Mentally Retarded, Lions and Lioness Club of Madras. Nearly 400 NSSs volunteers participated in the mega event. Around 100 Mentally Retarded student from five Schools were the Invitees for the programme
- ✓ Tamil Nadu state NSS organization celebrated “Youth Inspire programme” in associated with Babaji Ashram, Manapakkam to celebrate the 154th birth anniversary of swami Vivakanandha.
- ✓ Cyclone Vardah on 12-12-2016 severely created heavy damage in Chennai, Kanchipuram and Thiruvallur District. NSS students of Vels University Pallavaram has taken several rescue work in the Pallavaram municipal area of Velan Nagar, Mallika Nagar and Kattabooman Nagar from 12-12-2016 to 14-12-2016 for 3 days. The following rescue work was undertaken by NSS students of Vels University Pallavaram. Nearly 200 NSS volunteers are involved in this cleaning work.
 - a) Cutting of trees to clearing road block
 - b) Cleaning the streets.
 - c) Supporting the Electricity Board

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area Main Campus (Pallavaram) Satellite Campus(Thalambur)	13.91 acres 15.22 acres	-	University	29.13 acres
Class rooms	306	-	University	306
Laboratories	135	14	University	149
Seminar Halls	4+2	-	University	4+2
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	97	24	University	121
Value of the equipment purchased during the year (Rs. in Lakhs)	9,06,24,701	58,75,299	University	9,65,00,000
Others	-	-	-	-

4.2 Computerization of administration and library

<p>OPAC (Online Public Access Catalogue) facility Automation of the Library - Automated Book Circulation Issue of Barcode Identity Card to the students for ease of access in Library Provision of Inter-Library Loan (DELNET, MALIBNET and BCL) Vels Library Subject Gateway portal, Audio Video / Virtual Learning Centre, Implementation of Touch Screen Facility for the students to develop the Interactive User Interface and Wi-Fi facility</p>

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	88560	24502027	1150	513251	89710	25015278
Reference Books	12652	11597245	229	666778	12881	12264023
e-Books	117717	455707	20000	448500	137717	904207
Journals	329	1696832	14	30900	343	1727732
e-Journals	12040	3061969	341	382242	12381	3444211
Digital Database	13		3		16	
CD & Video	4802	181710	47	4116	4849	185826
Others (specify)	-	-	-	-	-	-

Others : Newly added

DELNET Institutional membership	16500.00
INFLIBNET e-shodh sindhu - Associate membership	10000.00
Library subject gateway domain	6414.00
BLOC - Business Line On Campus	299.00

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1562	22	204 mbps	-	1	8	38	-
Added	222	2	-	-	-	-	4	-
Total	1784	24	204 mbps	-	1	8	42	-

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

- Training in use of SPSS software to all research scholars and faculty members
- Advanced training program for computer science students
- Skill Development workshop on E-content development
- Orientation program on office automation to all the faculty members
- Training program on Curriculum Development was conducted
- Training program on Choice Based Credit System (CBCS) was conducted
- FDP Programme in Oracle
- FDP on Business Strategy Simulation in association with ICT ACT, Tamil Nadu.
- Faculty Development Program on Structural Equation Modelling and Preparation of Project Proposal for funding.
- Three days Faculty Development Program on “**Student Concentric Pedagogy**”
- Two days FDP workshop on **Stress Management**
- Training on Web tools and e-content for digital learning
- Two days FDP on **Pedagogy and Research Methodology**.
- Internet access with 1 GB NKN connectivity and 204 Mbps Aircel network
- Providing orientations and indulging faculties and students to take part in resources under MHRD guidelines such as – INFLIBNET – e-PG Pathsala, e-ShodhSindhu, Shodhganga, NPTEL, National Digital Library (NDL), CEC and SWAYAM.

4.6 Amount spent on maintenance in lakhs :

i) ICT	210.16
ii) Campus Infrastructure and facilities	605.55
iii) Equipments	151.00
iv) Others	32.15
Total :	998.86

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

- For boys and girls both, there is anti-ragging committee which insures ragging free atmosphere in the campus and in hostels.
- A Grievance Redressal Committee has been established as per the University Grants Commission (Grievance Redressal) Regulations 2012. The grievances of the students, undergoing Regular study, brought to the Head of the Departments are redressed by the Department itself then and there.
- Prevention, prohibition and redressal of sexual harassment of women employees and students Committee has been established as per the UGC Regulations, 2015. The Committee deals with issues relating to sexual harassment at the University. It is applicable to all students, staff and faculty.
- A special course on communicative English for the weaker section of students
- Extension activity committee has co-ordinators from different departments in extending the intellectual and infrastructural facilities to the student community outside the University and to common public.
- The Dean (Admissions), Deans (Students affairs), Director of International Students Cell function in respective domains to facilitate the students to have good academic atmosphere
- The University offers a Mentor- Mentee Programme' where the faculty members of the University serve as dynamic mentors for a group of 25-30 students and are accountable for addressing their academic and social needs on and off campus.
- Regular Parent-Teacher meeting conducted and it provides occasion for parents to get information about their wards. The attendance percentage and marks secured in Continuous Assessment is regularly intimated to the parents.
- The Placement and Training Cell of the University offers various kinds of aptitude and soft skill development programmes for the eligible students. The Placement cell outsource the training and also make necessary arrangements for signing MoUs with other outside agencies such as Six Phrase, Enrich & Excell, RIPE Training Institute, Revature Software Solutions, Focus Academy and IRMS Training Solutions.
- The University has an active Entrepreneurship development cell, which conduct awareness programs and provide guidance to become Entrepreneurs
- Needy students from different schools are provided with financial aid that includes free ships, Fee concession or waiver of tuition fees for the year and/or provision of hostel facility at a concessional rate.
- The Officer of International student's affairs look after the immigration needs, visa requirements, money transfer, accommodation and cultural adaptations of overseas students.
- Differently-abled users can get access to ramp, wheelchairs, etc as per their requirement.
- 24 hrs transport facility is available for students including those who residing in Hostels for any emergency service. Tie-up with nearby hospitals namely Kamatchi Hospital & Parvathy Hospital. The 24*7 Apollo Health Insurance Clinic is located within the campus
- SAP Training programme and course in Foreign Language such as French, Japanese are offered.

5.2 Efforts made by the institution for tracking the progression

- Through placement cell the progression of the students is monitored.
- Strong alumni association through which progression is tracked.
- The mentoring system also monitors the progression of the students from one level to other level.

5.3 (a) Total Number of students

UG	PG	Ph. D.	M.Phil.	Diploma
7769	1100	522	206	139

(b) No. of students outside the state

1098

(c) No. of international students

120

Men	No	%	Women	No	%
	6769	69.5%		2697	30.5%

Last Year (2015-2016)						This Year (2016-2017)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
883	438	21	1954	1	3296	564	584	28	2244	1	3420

Demand ratio : 1 : 2.3

Dropout : 1.6 %

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

Coaching classes and training programmes are arranged regularly for the students who wish to appear for NET / SET and competitive examinations. MoU signed with Bharathidasan IAS Academy to coach the IAS aspirants of the university within the campus. The Placement and Career Development cell and Library Information Centre provide these assistance.

No. of students beneficiaries

25

5.5 No. of students qualified in these examinations

NET	01	SET/SLET		GATE	01	CAT	
IAS/IPS etc		State PSC		UPSC		Others	3

5.6 Details of student counselling and career guidance

- Class-committees & its meetings for understanding student perspective, everything documented & follow up action taken.
- Mentorship: Each Mentor counsels 25 students & maintain a Record of the Mentees, their problems, challenges etc & counsels them accordingly.
- Teachers – Parent Interaction on a regular basis.
- Placement cells coordinate career guidance.
- Regular Industry Interaction Programmes and Seminars for giving a fresh perspective on career guidance
- Sixty hours of Soft-skill development programme for making them employment ready is given to all the final year students.

No. of students benefitted

All Students

5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
92	1591	1182	175

5.8 Details of gender sensitization programmes

- The university conducts gender related activities which are women – centric
- Women’s day being celebrated every year wherein outstanding women are honoured.
- Various awareness programs pertaining to women welfare are organized.
- The university have well-structured sexual harassment and women equality cell to deal with issues related to sexual harassment within the campus. The cell has been constituted as per guidelines of UGC.
- The committee consists of senior faculty members drawn across the schools of the university and administrative office.
- Grievance / suggestion by students, faculty or staff can be given directly to the coordinator of the committee.

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level National level International level

No. of students participated in cultural events

State/ University level National level International level

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level National level International level

Cultural: State/ University level National level International level

5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution		
a) Socially and Economically backward	481	Rs.89,75,604
b) Merit Scholarship	128	Rs.11,73,313
c) Scholarship for Sports persons	25	Rs.39,01,450
d) Vels Research Fellow	36	Rs.32,40,000 for 2016-17
Financial support from government	-	-
Financial support from other sources	-	-
Number of students who received International/ National recognitions	-	-

5.11 Student organised / initiatives

Fairs	: State/ University level	<input type="text" value="1"/>	National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>
Exhibition:	State/ University level	<input type="text" value="-"/>	National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed:

There are a number of redressal mechanisms and bodies which specifically look at complaints:

Grievance Redressal Cell and Online registration of grievance by students are effectively functioning.

- Students, issues – Class in charges /Head of the Department
- Ragging – Vice-Chancellor / Head of the Department
- Administrative issues –Vice Chancellor and Registrar
- Examination issues –Controller of Examination.
- Transport issues –Transport in charge
- Faculties – Heads, Deans, Registrar, and Deputy Registrar
- Committees related to functional areas

IQAC has representation in Examinations issues and in other functional areas.

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

VISION

Vels Institute of Science, Technology and Advanced Studies(VISTAS) strives to be an epitome of excellence in higher education by effectively providing its students with high standards of education and rigorous training with ample scope for the all round development of personality of the students and to promote positive change and social justice for the betterment of society.

MISSION

The Vision is to be achieved by the following methods:

- a) By cultivating scientific temper and innovative thinking by promoting independent learning, collaborative learning, and experimental learning using all the modern gadgets of ICT.
- b) By actively promoting and preserving higher value and ethics in education apart from sensitizing them towards the societal responsibility.
- c) By imparting skill based education to meet the global demand apart from providing the students an opportunity to acquire and cultivate leadership qualities.
- d) By installing the spirit of equity, communal and social harmony, sense of toleration among students apart from enriching them with right citizenship and love for the nation.
- e) By providing them various kinds of learning process such as experimental learning, experience learning, problem based learning, project based learning, e.learning, participatory learning and computer aided learning.
- f) By making them to do original, quality and innovative research which is proved by measurable outcome.
- g) By providing LMS, KMS and EMS to all the students apart from MIS.
- h) By undertaking outreach and extension programme to contribute to the welfare of the people.

QUALITY ASSURANCE

The University has established a system of Quality Assurance to monitor and enhance the quality of education.

6.2 Does the Institution has a management Information System

ERP

It is a compact package, designed to provide a sophisticated, state of the art web technology, aimed at bringing about total quality in Education Management. ERP focuses on excellent coordination between University and students, making e-education scenario "a reality".

It provides the detailed structure of the University and its departments. It covers all aspects of the University, Students, Faculties, Departments, Assessment Marks, Attendance, Examination Time Table, Results, Placements and other Co – Curricular and Extra - Curricular activities. Our University provides various information about the staff and students, through the website: www.velsuniv.ac.in/erp ERP helps the Faculty members, Parents and Students of our University to keep track of the day-to-day activities such as Attendance Management, Mentee Management, Management Information System (MIS), Internal Assessment Management, Reports Generation etc.

The following are some of the highlights and best practices of our user friendly System.

- The process of Course Registration, Student Registration, and Mentee Registration is simplified in our University.
- The attendance marking system in our University is very user friendly.
- The online leave submission, OD submission, Medical leave submission and their corresponding approvals are decentralized.
- The change/delete attendance, late attendance entry, internal assessment correction/deletion goes through automated hierarchical approvals.
- The attendance and the internal marks are transparent and can be viewed by students, parents, teachers and Heads of Departments. This information is also disseminated to parents through SMS.
- Mentors are provided with an efficient reviewing system for their mentees.
- A reminder through SMS helps the mentees to enter the attendance on time.
- Color coded report facilitates the mentors to easily track the reviewing /status / approval processes.
- The internal assessment reports can be generated from the University system itself which will then be sent to parents through postal communication
- The Central Library is automated by using Library Management Software **LIBGENIE**, Vital Functions like Book Circulation, User Registration, Transaction Details, Subject wise report generation and Stock Verification are carried out by this software.
- The examination section is fully computerized and automation is practiced from registration of students for examination, to publication of results and issue of grade certificates.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

VELS University follows a systematic process in the design and development of the curriculum, which involves high level of participation, discussion and critical inquiry involving all the stakeholders contributing to the introduction, innovation, and revision of the syllabi. The design and development of curriculum is vital to VELS University and is carried under the guidance of very important statutory bodies of the university in a planned systematic manner to match with its vision and mission. The curriculum is designed fully adhering to the guidelines of the UGC, AICTE, IMO, STCW, Pharmacy Council of India, DGS and other national and state academic organizations. The syllabus is designed to provide a comprehensive coverage of the subject with emphasis on fundamentals as well as applied aspects. Periodic changes are made based on societal needs that provide a thrust for national development. Current trends in the job market are also considered while developing the syllabus. Feedback from the faculty, academic peers, and experts from industry, current students and alumni is used in the initiation, review, and redesign of curricula. The feedback from Central and State Governments as well as research organizations in India and overseas also help to design and modify the curriculum.

The University is governed by Governing Board - otherwise known as Board of Management and this is the highest statutory body of this University. The members of this Board are drawn from various fields. The Board has members representing University Grants Commission, Govt. of India, and Industry, Eminent persons outside Academia, Senior Academic persons and senior officials of the University. The Vice-Chancellor is the Chairman of the BOM meets periodically to frame policies and programmes for the growth and improvement of VISTAS. It is this body which approves the introduction of any new programme / Courses.

After elaborate discussions on the content and organization of the syllabus in the respective Boards of Studies, it is passed on to the Academic Council for deliberations and approval. Suggestions from the external members of the Academic Council are well received by University and incorporated in the subsequent curriculum development exercises continuously.

The curriculum development process is reviewed and monitor by curriculum development committee for the whole university. The IQAC plays a predominant role on this.

Every department has a curriculum development cell (CDC), in which Professors, Associate Professors and Assistant Professors (SG) are members. New syllabi are formed by respective subject teachers and discussed in CDC. The design and development of curriculum and syllabi are done through CDC.

Every department has its own Board of Studies (BoS) which is a statutory body. There are external members in every BoS - the first member is from Industry, the second member is a reputed academician and the third member is an ALUMNI. Apart from these members Dean/Director/HOD and members of the faculty also the members of BoS. Once in six months they attend the BoS meetings conducted by the Institute and it scrutinize the curriculum and syllabi and give very good and relevant suggestions for improving the quality of the curriculum as well as the syllabi.

The academic audit is conducted once in 6 months. Based on the suggestions received from External Academic Auditors, the feedback from the faculty teaching the concerned subject and students the Curriculum & Syllabi are improved during the subsequent meeting of the BoS. The activities are put under strict compliances of time and quality and monitored by IQAC.

3.2 Teaching and Learning

Teaching – Learning process has been modified to include interactive instructional techniques, focused discussions, projects, presentations, internships and field visits. The talk and chalk method has been mostly replaced with ICT enabled teaching especially with blended learning. Independent leaning, Interactive learning, Collaborative and participatory learning are encouraged.

Virtual learning through the moodle programs of IIT Mumbai, IIT Kharagpur are being made available. Blended learning is promoted with the help of E-Platform and FOSS established in the university.

The recruitment of faculty members are done as per UGC norms viz., advertising through national dailies, screening of applications, constitution of selection committee as per UGC norms having Vice-Chancellor as the Chairman, conduct of interview, selecting the eligible candidates, forwarding the selection list and getting the approval of Board of Management and on receipt of selection orders, the selected candidates will join duty.

The faculty members are encouraged to do research. Special monetary incentives are given for publication. Necessary funds are provided for participation in seminars and conferences and other enrichment programs.

The Staff Student ratio is maintained as per norms of UGC/AICTE and other statutory bodies. (like PCI, IAP, D.G.Shipping etc.) Remedial classes are conducted for the students of different backgrounds and abilities. The institution has an effective mechanism for continuously monitoring the students progress. We have Mentor-Mentee system, where about 30 students are assigned to every teacher, and the teacher counsels the students on a regular basis. Further, class committees, comprising of class teacher, a student representative and HOD are meeting as and when required. Learner centered education is provided through appropriate methodology.

6.3.3 Examination and Evaluation

The Choice Based Credit System, and transparent examination and evaluation system have strengthened the efforts of the university to provide better Teaching Learning process which makes the students of VISTAS not only knowledgeable but also skill based enabling them to stand out from the crowd and meet the challenges in life confidently. The above process is effectively monitored by the IQAC.

University has adopted the continuous assessment system, where both formative and summative assessments are ensured. Students are allowed to apply for re-totaling, revaluation and even photocopies or the answer scripts are given on demand. This apart we have provisions for the conduct of instant exams. Thus, the evaluation process is more reliable and transparent. We have adopted the latest grading systems which are comparable to the world standard viz., Cumulative Grade Point Average (CGPA) and Overall Weighted average mark (OWAM).

- ✓ All works related to examination in the office of Controller of examination is completely computerized and under the ERP system the work has been automated.
- ✓ A manual for examinations adopted by the BoM is available and scheme of examination proposed by BOS as recommended by the Academic Council and approved by BOM.
- ✓ A committee has been constituted by COE to look into the cases of malpractices
- ✓ After enquiry, appropriate action is taken in each as per the University By-laws. Details are available in office of the COE.
- ✓ Answer books of all examinations are assessed only at the central assessment centre.

6.3.4 Research and Development

Research culture is being nurtured in the University departments by novel methodologies like providing “Research Starter Grants” from University budget. The University had taken many initiatives to promote research.

- a) A centre, named, ‘Centre for Advanced Research and Development’ (CARD) has been established with the aim of promoting research.
- b) Centre for Energy, Centre for Materials Sciences, Centre for Robotics and Industrial Automation, Centre for Energy Conservation have been established after the NAAC Peer team visit.
- c) 522 Ph.D. scholars are pursuing their Ph.D and 48 scholars have completed their Ph.D. during this period.
- d) The Board of research studies meets regularly to provide guidelines for research.
- e) Around 50 research projects have been already submitted to various funding agencies and the University has completed 3 major research projects with about Rs.25.22 lakhs and 7 ongoing projects, with about 190.34 lakhs funded by Dept. of Ayush, DST and DBT.
- f) 3 new inventions have been made.
- g) 8 patents filed in the area of Life Sciences, Electronics, Mechanical, Aquaculture and Chemistry
- h) Industry – Institutional tie-ups have been made to promote research.
- i) 120 highly qualified faculty members with rich research experience have been appointed to promote research.
- j) Faculty members have published 541 research papers in the National and International journals (382 Scopus + 159 Other Indexed journals), besides publishing 9 books and 3 articles in Books with ISBN number during this period.
- k) Access to 11717 online Journals (EBSCO, IEEE/IEL, ASME, ASCE, Inventi, Bentham, Micromedex’s Drugdex systems, INSPEC and CYGNUS database and associate member in INFLIBNET are made available in Library to promote research.

The University departments have organized 75 Seminar / Conferences and workshops. The University has so far signed 15 MoUs with many Universities, Institutions and Industries in India and abroad resulting in teacher and student exchange programmes leading to collaborative research, skill up-gradation and study programmes.

6.3.5 Library, ICT and physical infrastructure / instrumentation

Vels Institute of Science, Technology and Advanced Studies (VISTAS) has been constantly investing on infrastructure to provide best of learning facilities.

The University library possessed a collection of 102591 Books, 137717 E-Books, 10032 Back Volumes, 4106 Dissertations and 4849 Audio visual Resources. The Library subscribes to more than 343 Periodicals (National & International) and 12381 E-journals. To facilitate quality teaching & research, Digital Library access to Electronic information services to ensure the information needs of our Student, Faculty and Staff are met. Staff and Students can access E-Journals and E-books from EBSCO (Business Source Elite & Academic Search Complete), Pro Quest, J-Gate, IEEE/IEL, ASME, ASCE, NPTEL, Micromedex's Drugdex Systems, Bentham Science Pharmacy, INVENTI Online, NATURE, Law Finder, Lexis Nexis India Law Online and EBrary E-Books Pro Quest Academic Complete. Online Learning process is made student- centric focusing on LMS, KMS, EMS - Edx, TED, Khan Academy, Coursera, and NPTEL. We have made the staff and students to enroll in National Digital Library, MHRD. 1379 Books, 20,000 E.Books and 355 E.Journals have been added in the stock during the period of review.

Library Website : A separate library website (<http://velsunivlib.wixsite.com/vistaslibrary>) provides an overview of the library covering brief history, Mission and Vision, Library holdings such as Print and Online, Services provided, Rules and Regulations, it also provides link to access subscribed library resources like online journals, DELNET, Shodhganga, e-Shodhsindhu, NDL, INFLIBNET etc., A separate library subject Gateway web portal (<https://www.velslibrarysubjectgateway.com/>) which helps to provide information and educational learning resource for each and every school in university in an organized manner. It includes Open Source Online journals, e.Books, Fellowships, Soft skills, Career portal, Repositories, Resources coming under the guidelines of MHRD such as SWAYAM, e-PG Pathsala, and Consortium for Educational Communication, NPTEL, Shodhganga, e-Shodhsindhu and National Digital Library can be access via this portal anywhere at any time. Associate Member of e- ShodhSindhu, DIGITAL LIBRARY CONSORTIUM through INFLIBNET.

The campus has all facilities such as Playgrounds, Hostels, IT Infrastructure, including Wi-Fi facility, 24 hours power backup, well equipped library, cafeteria, three air-conditioned auditoria with a capacity of 1200, 250, 120 and a air-conditioned seminar hall with a seating capacity of 150, and a Clean and Green environment. Full Mission Bridge Simulator and Ship-in-campus to facilitate quality in teaching. Equipment worth about one crore have been added. 10 more class rooms have been connected as Smart class rooms. Wi-fi facility has been strengthened and 15 more LCD have been added.

Believing in the co-existence of a sound body and a sound mind, VISTAS has a spacious play ground with well laid out courts for Basketball, Volley ball and Kabaddi. For the convenience of students to practice various sports, the ground is divided into 2 parts. In Ground – I facilities provided are suitable for Football, 200 mts. Race, Track, Cricket Net and Cricket pitch. In Ground – II Cricket pitch is at the centre of the field and facilities are made for the students to practice Kabaddi Basketball and Volley ball. To promote sports and games and to motivate the students to develop sporting spirit, the academy conducts inter-collegiate tournaments and Inter-school State level tournaments in Volley ball, Kho-Kho and Cricket. “Fitness leads to fineness”. Students regularly exercise and sweat out in the modern and well equipped Gymnasium, built according to the specifications of national standards. The Multi-Gym has 11 stations for various exercises.

6.3.6 Human Resource Management

- Rewards/ Merit follows a process of fair selection at teaching and non-teaching levels
- Regular induction programs for new teaching and non-teaching staff
- Mentoring by senior faculty
- Conduct regular orientation programs,
- Refresher courses, staff development programs, and short term capacity building Workshops

6.3.7 Faculty and Staff recruitment

- Faculty and staff recruitment are centralized
- Only competent members selected with qualified degree
- Experienced members are given priority while recruiting
- The candidates are selected for appointment based on their merit and passion for this teaching profession.
- Based on the rules and regulations and directions given by the Government and UGC, the recruitment of the faculty and non-teaching staff is followed strictly.

6.3.8 Industry Interaction / Collaboration

- Setting up of Industry Institute Planning Cell
- Organizing Workshops, Conferences and Symposia with joint participation of the faculty and the industries.
- Encouraging engineers and management experts from industry to visit our Institution to deliver lectures.
- Participation of experts from industry in curriculum development.
- Arranging visits of staff members to various industry
- Professional consultancy by the faculty to industries.
- Industrial testing by faculty & technicians at site or in laboratory.
- Joint research programs and field studies by faculty and people from industries.
- Visits of faculty to industry for study and discussions or delivering Lectures on subjects of mutual interest.
- Visits of industry executives and practicing engineers to the Institute for seeing research work in laboratories, discussions and delivering lectures on industrial practices, trends and experiences. Memoranda of Understanding between the Institute and industries to bring the two sides emotionally and strategically closer.
- Human resource development programs by the faculty for practicing engineers and management
- Visiting faculty / Professors from industries.
- Practical training of students in industries.

6.3.9 Admission of Students

The Admission policy of the University is clearly laid down and widely circulated. Detailed information about the eligibility for admission to various programmes, conduct of the entrance test and the syllabi for the test including the model papers are distributed to all the candidates in the form of admission information brochure. Applications are available on the University website and in person.

- ❖ Admissions for various academic programmes are organized on all India basis.
- ❖ Admission notification is published in all the leading newspapers at both regional and national level.
- ❖ Publicity of the admission process is made by publishing the institutional prospectus online in the institutional website www.velsuniv.ac.in and by circulating the prospectus to the students and the public.
- ❖ Necessary information about the departments common facilities in the university and other facilities are made available in the university website
- ❖ Registration of candidates for the eligible courses.
- ❖ Conduct of Entrance examinations (for Professional courses)
- ❖ Preparation of Rank list
- ❖ Medical Examinations (Maritime Studies)
- ❖ Provisional selection based on merit (as per Central Govt. reservation norms)
- ❖ Interview cards to applicants
- ❖ Issue of admission cards and payment of fees
- ❖ For the all the Professional courses admissions are based on marks scored on entrance examination and qualifying examinations giving equal weight to both examination.

The Entrance test is being conducted every year on an All-India basis mainly with the objective of attracting bright and meritorious students from different parts of the country.

Admissions are purely based on merit and by following the rule of reservation. The admission policy clearly indicates the method of arriving at the merit list for admission into various programmes offered by the University.

Reservation policy is adopted to help the disadvantaged community, and differently abled. Students are provided with concessions and scholarship from the university reserve fund apart from scholarships provided by Govt. Agencies. Athletes and sports persons are admitted as per norms and they are given free education including Hostel fee.

6.4 Welfare schemes for

Teaching	Interest Free Loan Fee Concession to the wards of Staff Contribution Provident Fund Maternity Leave Staff Quarters Free Transport Accident Risk Insurance
Non teaching	Contribution Provident Fund ESI Interest Free Loan Fee Concession to the wards of Staff Maternity Leave Free Transport Accident Risk Insurance
Students	Accident Risk Insurance Fee concession Scholarship

6.5 Total corpus fund generated

Rs.10 Crores

6.6 Whether annual financial audit has been done

Yes No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Academic Peers	Yes	Dept. wise audit
Administrative	Yes	M/s.Sundararajan Associates	Yes	Management audit

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes Yes No

For PG Programmes Yes No

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

The Controller of Examination Office is functioning with a full time Controller of Examinations, One Deputy Registrar, One Asst. Registrar and 10 supporting staff. The duties and responsibilities are well defined and the work flow is smooth and streamlined. This Office has the facilities for central valuation, Store room, Computers, Database Server and Printing /Photocopying facilities with in it. Exam timetable, seating arrangement are computerized.

The students are duly kept informed about the structure of the examinations, continuous assessment, tutorials, dates of end semester examination, continuous assessment examinations and practical examinations, these are included in the academic calendar of the university. All these informations are given by the Controller of examinations to the UG and PG students during the induction programmes itself. Facilities for verification of marks, photocopies of valued answer scripts, re-totalling and revaluation facilities are made available to the students. Optical Marking Recognition(OMR) based answer sheets to avoid human error besides hastening the process. Answer sheets with OMR based cover page has helped in transferring data to computers besides eliminating manual data entry operation. Dummy number system has been introduced from the academic 2014-2015 to have more transparency in evaluation.

The performances of the students are evaluated in continuous assessment scheme and 40% of total marks is allotted for Continuous Assessment and 60% for the end semester examination. A well-structured criteria is followed for the award of CA marks. Only external valuation is adopted in case of UG degrees and both Internal and External valuation in case of PG degree. The university has a grievance redressal cell which address issues, regarding the examination and evaluation.

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

NOT APPLICABLE

6.11 Activities and support from the Alumni Association

- Regular Alumni meet is held in the campus
- Interaction of Alumni and the present students are conducted regularly
- Alumni feedback also obtained to improve department activities.
- In the University's website, provision is given for the alumni to download the form that captures their profile. Alumni can fill up the form and forward through mail for updating in the database also, on every convocation day, invariably alumni meet is organized during which the progression details are collected and updated.
- We have a University Strong Alumni Association and it conducts a Alumni Meet every year on January 26th, since 2008. The committee members of Alumni Association consist of members from all the departments and the few members of the current final year students.
- Alumni are involved in providing feedback on the curriculum and act as a bridge between industry expectations and academic requirements.

6.12 Activities and support from the Parent – Teacher Association

The meetings with the parents are conducted at the department level to know their expectations for improving the academic performance.

6.13 Development programmes for support staff

Training on Laboratory equipment, applications, usage and safety for non-teaching staff was conducted.

For non-teaching technical staff, training on related theoretical topics and drafting were imparted.

6.14 Initiatives taken by the institution to make the campus eco-friendly.

Energy conservation

The University authorities are aware of energy conservation.

- Energy conservation awareness is done on daily basis and the National Energy Conservation Day is celebrated on 14th December to keep everyone aware of the importance of energy conservation.
- Inverter is used when there is power shutdown for short duration instead of operating generators.
- The LED lamps are progressively used in the place of other lamps.
- Partitioning the big halls in small size / falls roofing are carried to minimize the power consumption.
- Renovation of wiring and replacement of transformers are done regularly.
- All the rooms have instruction boards to switch-off fans, lights, and AC and Computer terminals when not in use.
- Emphasize is on paper less governance.
- Plastic free campus.

Use of renewable energy

- The University has installed three wind mills with a Capacity of 250 KW H.T. (Each) and Annual Wind Power Generation in average is around 85,028 units. Three Wind Mills are supplying power to the Tamil Nadu Power Grid and withdraws the power from the grid to the university requirements.
- Solar lights are used in the main roads of university.
- The Biogas plant is in operation and the Biogas produced from food waste, decomposable organic materials and kitchen wastes is used in Hostel.

Water harvesting:

- All buildings are having water harvesting facility where by the rain water is not allowed to drain.
- A percolation tank is under construction to store the rain water.
- The filtered waste water from the RO Plant is used for maintenance of the garden and lawns in the campus.
- The NSS students create awareness in the local area on the importance of Rain Water Harvesting.
- World water day is celebrated on 22nd March every year with a message to the students and public on rain water harvesting, conservation and recycling of waste water.

Efforts for Carbon neutrality:

- Tree plantation is done periodically and the greenery is maintain in the campus.
- Our green cover is around 30% of the total surface area.
- Only Bharath3 fuel efficient vehicles are used and vehicles are allowed to park only in selected area and not within campus.
- Gen set usage is restricted and is used only sparingly.
- Minimization of paper usage by adopting online communications and ERP systems.
- The Herbal Garden is maintained by the School of Pharmaceutical Sciences.
- Campus cleaning day is observed periodically with the help of NSS.

Plantation:

- Adequate measures have been taken to protect the trees in and around the campus.
- The campus is well maintained with trees and ornamental plants.
- New trees are planted regularly as and when required.

Hazardous waste management:

- Hazardous waste generation is reduced by due process at the initial stage.
- The faculty of Science, Head of the departments and Principle Investigator in case of project adopt standard and ethical practices of handling of hazardous chemical.
- Incinerated are used to dispose human sanitation bio waste.
- All biological waste are disposed after decontamination.

e-waste management :

- e.waste generation is reduced by going for superior data storing devices.
- Use of CD is slowly phased out. Old computers and gadgets are collected and disposed of through contract persons.
- Through green computing, the e.waste is managed in accordance with the guidelines of the Pollution Control Board.
- Under exchange options and buy back systems certain gadgets of replaced.

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

- ❖ ICT in teaching methods are effectively implemented.
- ❖ Innovation in teaching is a combination of teacher taught and technology. All these three must go hand in hand to create conducive climate for innovative learning. The teachers initiate innovative pedagogies the taught initiates and innovates self-learning shared teaching learning and peer evaluation strategies. The technology such as Smart Class rooms, Mobile learning, Webinars, social networks help in enhancing the teaching learning process.
- ❖ Inter-disciplinary, multi-disciplinary and cross disciplinary approaches in research are being encouraged. Incentive scheme for publication has enhanced the quality of papers.
- ❖ The university develops leadership in all the three levels namely personnel, team, institutional.
- ❖ Laboratories have been strengthened to impart quality education.
- ❖ Local language is taught for the students from outside the state and for foreign students.
- ❖ Foreign language centre is offering French, Japanese and German.
- ❖ The university has introduced a few programmes such as 4 year Integrated B.Sc., B.Ed., 3 year courses in B.A., Economics, B.Sc., Aviation, B.A., Music and B.A., Dance.
- ❖ The individual learning, interactive learning, collaborative learning have been practiced and a blended learning coupled with theory, practice, field visits, internships have been put in use. Remedial learning, bridge learning and giving open sources to students are in practice.
- ❖ The Automation is implemented in Admission, Examination, Internal Quality Assurance Cell, Administration, Finance and Accounts, Academic Communication and Library.
- ❖ E. tendering has been introduced
- ❖ ERP system in all branches of administrations including e.purchase.
- ❖ De-centralized system of administration.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

S.No.	Plan & Actions at the beginning of the year	Action Taken
1.	To have more regular, systematic planning and development of the curriculum with more number of outside Academic experts. Curriculum revision needs to be done at more regular intervals with analysis of impact.	Curricula Committee re-notified with inclusion of external experts. This issue has been addressed during revision of curricula for PGs and UGs. There was extensive interaction between various departments with mutual interest. As a result now there is a system in place which takes care of such activities. Revision of both PG and UG curricula has been accordingly done.
2	To Plan for more Research projects through Funded agencies	52 projects worth about Rs.23.35 crores have been submitted and 4 projects have been sanctioned worth Rs.1,07,11,900/-
3.	Feedback System for the forthcoming semester	It has been decided to have Online Feedback system in the fourth coming semester.
4.	To initiate the establishment of Centre of Excellences	Centre of Excellence for Energy and Alternative fuels and Centre of Excellence in Automation and Energy Conservation have been established in this period.
5.	Common Instrumentation Centre	Work is ongoing
6.	To bring more Industrial Collaboration and to enrich the students.	12 Industrial collaboration have been initiated.
7.	To include Life Skill courses for all students.	Yoga is provided to the students through World Community Service Centre and for other life skill courses on e.platform namely MOOC (SWAYAM)

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

<ol style="list-style-type: none"> 1. Nurturing Research and Innovations 2. Implementation of Automation

Details Enclosed : ANNEXURE - II

**Provide the details in annexure (annexure need to be numbered as i, ii,iii)*

7.4 Contribution to environmental awareness / protection

- Green audit is regularly conducted.
- Submission of student's assignments as soft copies is encouraged.
- Awareness Programme on Plastic free Environment was conducted.
- Free emission check-up for all the vehicles is organized for students and staff.
- Staff monitors unnecessary AC, Fan other electrical appliances used in the unoccupied class rooms and staffrooms.
- The maintenance department also tracks the costs of equipment repairs in comparison to the original cost of the equipment to determine whether or not it would be more cost effective to replace that piece of equipment with a more environmentally-friendly model.
- To create awareness among the public, our Prime Minister's project —Swachh Bharat is being implemented and our University students were involved in cleaning the Pallavaram Railway Station, Bus stand and nearby streets to create awareness amongst the public.
- Environmental awareness campaigns are regularly conducted through our NSS students

7.5 Whether environmental audit was conducted? Yes No

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

- Increase in number of Research publications in Scopus Indexed journals during the period under review is our major strength.
- Joining of more number of Ph.D., holders as faculty members and more Ph.D., students seeking admissions in the university can be definitely consider as a major strength.
- Teaching learning process has been strengthened during the period by installing more number of Smart Class room, introducing online resources and by becoming member in National Digital Library.
- The major weakness is the resource constraint the funding agencies are not funding to the research projects as we expect. There is hesitation because of Self-financing nature.
- Getting senior faculty members still continue to be a major challenge.

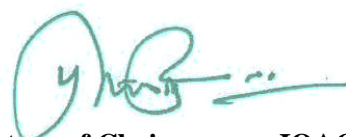
8. Plans of institution for next year

- International Collaboration – Student exchange, Faculty Exchange, Semester abroad, joint conferences, Counseling and helping student taking study abroad
- Courses for physically hearing impaired persons.
- NAAC Re-assessment to be applied
- Publish in good Impact Factor Journals
- More Collaborative Projects
- Improvement in Quality of teaching
- More Funded Projects
- Improve the Industry-Institute Linkage
- More Patents from our students & faculty
- More industry consulting assignments
- Improving placement record
- Improve communication skills of students
- Faculty empowerment through skill improvement programs
- Scope to start more Centers of Excellence
- Develop entrepreneurship & Business Incubation Centers with the help of Government support and partnerships and greater student involvement in becoming entrepreneurs
- Faculty quality improvement by bringing in faculty with industry exposure



Signature of Co-ordinator – IQAC

Seal **Dr.S. ARUN, M.E., Ph.D.,**
Director - IQAC & Associate Professor - CSE
Vels Institute of Science, Technology and
Advanced Studies (VISTAS), Vels University
Pallavaram, Chennai - 600 117.



Signature of Chairperson - IQAC

Seal **Vice Chancellor**
VEL'S INSTITUTE OF SCIENCE
TECHNOLOGY & ADVANCED STUDIES
Velan Nagar,
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Annexure I

Abbreviations:

CAS	-	Career Advanced Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
UPE	-	University with Potential Excellence
UPSC	-	Union Public Service Commission



ANNEXURE – I

Academic Calendar 2016-2017

**VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND
ADVANCED STUDIES**

Internal Quality Assurance Cell

EVENTS FOR THE ACADEMIC CALENDAR - JULY 2016- JUNE 2017

July 2016

S.No.	Date	Activities	Department / School
1.	11/July/2016	University Re-opens for students : Odd Semester	

August 2016

S.No.	Date	Activities	Department / School
1	8/Aug/2016	I Continuous Assessment Test for UG & PG degree courses except I year UG & PG Degree courses	
2	15/Aug/2016	Independence Day Celebration	

September 2016

S.No.	Date	Activities	Department / School
1.	8/Sep/2016	II-Continuous Assessment Test for UG & PG degree courses except I year UG & PG degree courses	
2.	21/Sep/2016	II Continuous Assessment Test for All First UG degree courses I Continuous Assessment Test for all I PG degree courses	

October 2016

S.No.	Date	Activities	Department / School
1	2/Oct/2016	Swachh Bharat Mission	NSS / Rotaract Volunteers
2	7/Oct/2016	Vels Family Day	
3	15/Oct/2016	National Students Day – Dr.Abdul Kalam’s Birth Day	
4	17/Oct/2016	III –Continuous Assessment Test for UG courses. II-Continuous Assessment Test for I year PG Courses	
5.	20/Oct/2016	FDP on Business Strategy Simulation in association with ICT ACT, Tamil Nadu	School of Management Studies and commerce
6.	24/Oct/2016	Commencement of University Practical Examinations	School of Basic Sciences

7	25/Oct/2016	One day “Entrepreneurship Orientation Programme” by NSIC	School of Management Studies and commerce
8	31/Oct/2016	National Unity Day	First Year students of All stream

November 2016

S.No.	Date	Activities	Department / School
1	3/Nov/2016	One Day Women Empowerment Workshop on University Self-help Group Bazaar	School of Management Studies and commerce
2	7/Nov/2016	Model Examinations for all UG & PG courses	
3	11/Nov/2016	National Education Day	All Students including students of School of Education.
4	17/Nov/2016	International Students Day Commencement of University Theory Examinations	School of Law and School of Management Studies
5	23/Nov/2016	Commencement of University Examinations for I year UG & PG degree courses	

December 2016

S.No.	Date	Activities	Department / School
1	2/Dec/2016	IQAC Meeting	
2	3/Dec/2016	Semester Vacation begins	
3	11/Dec/2016	Birthday of Shri Subramania Bharati	All students knowing Tamil
4	29/Dec/2016	University Reopens for Even Semester for teaching staff	
5	31/Dec/2016	Declaration of Results November 2016 Semester Examinations	

January 2017

S.No.	Date	Activities	Department / School
1	2/Jan/2017	One day National conference on Elephant Conference“ University Re-opens for Students – Even Semester	School of Pharmaceutical Sciences

2	5/Jan/2017	Declaration of Result November 2016	
3	12/Jan/2017	National Youth Day	All Students
4	25/Jan/2017	FDP Programme in Oracle	School of Computing Sciences

February 2017

S.No.	Date	Activities	Department / School
1	4/Feb/2017	Faculty Development Program on Structural Equation Modelling and Preparation of Project Proposal for Funding	School of Management studies and Commerce
2	6/Feb/2017	I Continuous Assessment Test for UG & PG Courses	
3	13/Feb/2017	FDP by Dr. Nicola Laing- Crawford & Mr. Dileep from City of Glasgow UK	School of Maritime Studies
4	28/Feb/2017	National Science Day	Students belonging to Science stream including Engineering.
5	21/Feb/2017	International Mothers Language Day	School of Languages
6	24/Feb/2017	Vels Nakshatra – 2017	

March 2017

S.No.	Date	Activities	Department / School
1	2/Mar/2017	II Continuous Assessment Test for UG & PG courses	
2	8/Mar/2017	International Women's Day	All Women Students
3	17/Mar/2017	Sports day	
4	22/Mar/2017	World water Day	School of Engineering and Life Sciences
5	24/Mar/2017	Muthamizh Vizha	School of Languages
6	30/Mar/2017	III Continuous Assessment Test for UG Courses	

April 2017

S.No.	Date	Activities	Department / School
1	7/Apr/2017	World Health Day	School of Pharmaceutical Sciences and School of Physiotherapy
2.	10/Apr/2017	Commencement of University Practical Examinations	
3.	14/Apr/2017	Dr.B.R.Ambedkar's Birth Day	School of Law
4.	19/Apr/2017	Model Examinations for all UG & PG courses	

May 2017

S.No.	Date	Activities	Department / School
1	4/May/2017	Commencement of May'2017 End Semester University Theory Examination	
2.	6/May/2017	Vels Entrance Examination	

June 2017

S.No.	Date	Activities	Department / School
1	4/June/2017	World Environmental Day	School of Life Sciences and Dept. of Civil Engineering and Management
2	21/June/2017	International Yoga Day	Students who have opted Yoga as Elective
3.	28/June/2017	Declaration of May 2017 Semester Examination Results	



ANNEXURE – II

Best Practices

Best Practice – 1

1. Title of the Practice

Nurturing Research and Innovations

2. Objectives of the Practice

After becoming university our prime focus has been on promoting research and innovation which can ultimately contribute to the technological development of the country.

Objectives are

- a) To motivate the faculty members to concentrate on research and publish in journals with high impact factors which are indexed.
- b) To augment interdisciplinary, multi-disciplinary and cross disciplinary approaches apart from collaborative research.
- c) To facilitate the faculty members to write books, monographs for publication by National and International publishers.
- d) To strive continuously and encourages the faculty members to undertake projects from funding agencies and there are several PI driven research projects under operation.
- e) To give the benefit of research and development to the society at large.
- f) Encourage faculty to generate new ideas which are unique, novel and are funded. This has led to submission and sanction of more number of projects.

3. The Context

- This synthesis of teaching and research is the fundamental necessity for any university. The faculty members are encouraged to carry both research and teaching without compromising quality.
- A Senior Scientist has been appointed as Research Advisor to give a boost to the research activities.
- To promote research, a specific wing known as Centre for Advanced Research and Development (CARD) has been established and a separate cadre known as “Scientists” have been appointed to do the research on “full-time basis”
- The university has an innovation club in which students are members and research among students is facilitated.

- The Incubation centre with five units which enabled the students to incubate their ideas are functioning within the campus
- The university also provides starter grant to promote research among young teachers.
- A uniform credit points have been assigned for every publications depending upon impact factor and corresponding monetary incentives are given to the staff who publishes paper in indexed journal.
- Staff members have been deputed to the foreign countries to attend seminars and conferences and Scientists and senior faculty members have been invited to this university to have interaction with our faculty, researchers to promote research.

4. The Practice

- A stipend of Rs.7,500/- p.m for full-time research scholars who have been selected by the specified committee is given for a period of three years. The University has allotted 20 such Fellowships for every year and 36 scholars are already availing this fellowship.
- The teachers are given starter grants upto Rs.1 lakh from the university fund to promote research among the young teachers and university has provided budgetary allocation of Rs.10 lakhs per year. So far Rs,6,54,800/- have been given to staff members under the scheme.
- Fifty five staff have attended international seminars and conferences in foreign countries with either partial / full support from university. 22 staff members have attended conferences in foreign countries since the NAAC Peer Team Visit.
- One hundred ninety distinguished foreign Scientists / Experts from UK, Japan, USA, Denmark, USA, Nigeria, Australia, Newzeland, France, Switzerland, Canada, Ireland, Korea, London, Europe, Mauritius, Kuwait, Eriteria, Germany, Ghana, Bangkok, Malaysia and Singapore have visited the University departments for academic interactions. 25 dignitaries have visited and given lecture since the NAAC Peer Team visit.
- For publication, if any survey or experiment is to be done, the cost of survey / experiment and analysis is borne by the university. So far **Rs.35,94,010** have been given to staff members to conduct survey / experiment, so as to help them to publish papers or to apply funded projects.
- At the end of every academic year, the total credit points secured by each teacher in publishing the article are calculated and monetary incentive is being given.
- In case of teachers who want to complete their Ph.D a period of three months leave with salary is given.

- For the teachers who are doing research within this university fee waiver is given.
- The entire expenditure involved in preparing, printing and submitting the research proposals to the funding agencies are borne by the university.
- The expenditure incurred for filing the patent is also borne by the university.
- Common Instrumentation Centre has been established.
- A unique Research Centre for Fish Immunology is contributing much to the fishing community.
- Very few institutions are recognized as Remote Centre of IIT-Mumbai and IIT-Kharagpur and VISTAS one of them. Number of workshops, seminars are conducted periodically under these programme. Recently IIT-Mumbai has come with function to make Vels University as a Relay Centre for nearby schools through A-View Software. NTPEL courses are offered through online as a part of curriculum.
- Centre for Energy and Alternative Fuels, Centre of Excellence in “Materials Research” and Centre for Energy and Power Conservation have already been established after the visit of NAAC peer team in 2015.
- Orientation, training and awareness programmes to Deans, Directors, HODs, Ph.D., guides and Co-guides, investigators, researchers and doctoral committee members. The topics suggested for orientation shall include Grant writing, research methodology, patent filing, scientific writing and editing, statistics, Industry-institute Interaction. Similar orientations training programmes may be extended to research scholars of University, whenever required.

Training / Workshops conducted by the departments of the University

S.No.	Name of the Speaker	Topic	Date	Department	Number of Participants
1	Dr.Saranya Narayanan, Jeevan Blood Bank, Chennai.	Stem Cell Research and Organ Regeneration and repair	21.08.2009	Biochemistry	100
2	Dr.Devaparasad Apollo Hospitals, Chennai.	Stem cell in tissue Engineering	24.08.2009	Biotechnology	100
3	Mr.Jagadeesh, Olympia Tech Park	Research and Development	19.02.2010	Biochemistry	100

4	Dr. Anu Suresh, Biotechnology Curriculum, Coordinator and Instructor, Mission Valley, California	Bio- nanotechnology	08.03.2010	Biotechnology	100
5	Dr.Sairam Professor Banaras Hindu University Varanasi (Pharmacy)	“Research Opportunity in Pharmacy”	02.02.2010	Pharmacy	200
6	Prof. Mukesh Doble, Department of Biotechnology, IIT Madras	Bioprocess scale up and product development & Research	04.10.2011	Biotechnology	100
7	Dr.R.Srinivasan Lecturer, School of Pharmacy and Health Sciences, International Medical University, Malaysia.	Future Opportunities and Research in Natural Products.	04.08.2011	Pharmacy	150
8	Mr.T.C.James, Dept. of IPR, Govt. of India	“Intellectual property rights”	08.09.2011	Engineering	150
9	Dr.Sathish, Professor , University of Ireland	Recent advances in Nano-technology	07.08.2012	Biotechnology & Chemistry	150
10	Dr. Satheesh Krishnamurthy, Research Professor, DCU, Ireland, UK,	Recent Advances on Nanotechnology	07.08.2012	Chemistry	200
11	IIT, Bombay, NATIONAL MISSION ON EDUCATION THROUGH ICT, MHRD	Introduction to Research Methodologies	25.06.2012	Engineering	150
12	Dr.S.Arunachalam, Professor, School of Computing and Engineering, University of East London, USA	International Workshop on Ph.D. Research	09.08.2012	Management Studies	250

13	Mr. Sambandham Guest-Lecturer, Department of Molecular Biology, University of Madras	Genetic Engineering Research	22.01.2013	Bioinformatics	100
14	Dr. N.K.Balasubra- manian Clinical research co-ordinator, Quartesian Clinical Research,Bangalore	Statistics and Its Applications In Research”	30.07.2013	Biochemistry	50
15	Dr.Natarajan Velmurugan, Scientist, Advanced Institute of Science and Technology, Protein Engineering Laboratory, Department of Chemical and Biomolecular Engineering, Korea	Medical Coding Training Programme	12.11.2013	Biotechnology	50
16	IIT, Bombay, NATIONAL MISSION ON EDUCATION THROUGH ICT, MHRD	Research Methods in Educational Technology	02.02.2013	Engineering	150
17	Thambipillai Srikanthan, Chair, School of Computer Engineering, Nanyang Technological University, Singapore	Research possibilities in Cloud Computing	12.04.2013	Engineering	150
18	Dr.S.Arunachalam, Professor, School of Computing and Engineering, University of East London, USA	Writing Research Articles in Indexed Journals	06.04.2013	Engineering	

19	Dr. R. Jayapal, Senior Scientist, TNSCST, Govt of Tamilnadu	Research funding sources from TNSCST	12.09.2014	Biotechnology	200
20	Dr.Wendy Brown, Wendy Brown Pharm.D, MPAS, PA-C, AE-C, Associate Professor, North Dakota State University, USA	Management of COPD	21.12.2014	Pharmacy	125
21	Shri. R. Devan Deputy Controller of Patents and Designs, Patent Office, Chennai.	Introduction to IPR & Patent Systems	10.04.2014	Vels IPR	250
22	Dr.Keneth Sundaraj, University Malaysia Perlis	Computational Intelligence & Advanced Manufacturing Research	2 nd and 3 rd May 2014	Engineering	200
23	Shri. R. Devan Deputy Controller of Patents and Designs Patent Office, Chennai.	Design of an instrument – Recycling of Energy”	27.01.2015	Vels IPR	150
24	Dr.Sharana Gouda, Assistant Controller of Patents and Designs, Group Leader – Biotechnology, The Patent Office, Govt. of India	Recent Developments in Gene Defect Diseases Diagnosis	12.02.2015	Biochemistry / IPR	150
25	Dr.B.Sabitha, Associate Professor, Dept. of Biotechnology Adyar Cancer Institute, Chennai.	Computational Drug Discovery	23.02.2015	Biochemistry / IPR	150
26	Mr. T V Madhusudhan Assistant Controller of Patents and Designs Patent Office, Chennai.	“Inventions in Chemicals and Pharmaceuticals”	13.04.2015	Vels IPR	150

27	Dr. P. Anbarasan, Professor of Chemistry, IIT Madras, Chennai	Rhodium Catalysis in Organic Synthesis	29.09.2015	Chemistry	150
28	Dr. M. J. Xavier, Director, VIT Business School.	Research Methodology	18 th and 19 th May 2015	Management Studies	200
29	Dr. Jayadev Raju, Scientist, Food Directorate, Government of Canada	Next Generation in Life Sciences: A Perspective of a Toxicologist	25.02.2016	Biochemistry	150
30	Shri. V.Prabhakaran, Head, Research and Development Division, Madras Pharmaceuticals Pvt. Ltd., Karapakkam Chennai	Current opportunities in Formulation Development Research	27.02.2016	Pharmacy	100
31	Dr.Natarajan Govindan, Editor, Indian Journal of Science and Technology	Research Communications	13.10.2016	Engineering	200
32	Dr. R. Logeswaran, Dean, Postgraduate Studies, Asia Pacific University, Malaysia, Dr. M. Murugappan, Professor, Kuwait College of Science and Technology, Kuwait	Emerging Trends in Engineering Research	20.10.2016 & 21.10.2016	Engineering	300
33	Dr.Ushakalyani Retd. Director of Collegiate Education.	Research Methodology & 20 th Century Literature	11.03.2017	English	100
34	Dr. M. Hariharan, Department of Biomedical Engineering, SRM University, Chennai	Art of Writing Research Articles	01.07.2017	Vels University	450
35	Dr. Mukesh Doble, Professor of Biotechnology, IIT Madras, Chennai	Design of Experiments in Research	01.07.2017	Vels University	450

5. Evidence of Success

- ❖ The research publications have increased considerably and the total publication during 2009-2017 comes to 2012 publications of which 900 are Scopus indexed. It can be noted that 1326 articles have been published since NAAC peer team visit, of which, 456 articles are Scopus indexed.
- ❖ The faculty members have published 2012 research articles in the International and National journals, besides publishing 61 books and 81 chapters in Books with ISBN number. 27 books have been published since 2015.
- ❖ The University has filed 35 patents, invented 39 new products and Transfer of Technology has been made for 7 products. The University has filed 10 new patents developed three new products and has made ToT in case of one product after Peer team visit.
- ❖ The University has signed 173 MoUs with many Universities, Institutions and Industries in India and abroad resulting in teacher and student exchange programmes leading to research, skill up-gradation and knowledge sharing.
- ❖ The University has completed 22 research projects during the period of seven years and 9 ongoing projects have been funded by UGC, Ministry of Earth Sciences, DST, AICTE, DIT, DRDO, TNSCST, Ayush, and BHAVINI, Kalpakkam amounting to a total grant of **Rs.5.27 crores**. The University has attracted **Rs.1.90 crores** as research fund from various funding agencies through seven new projects after the visit of NAAC Peer Team.
- ❖ Consultancy amount has been generated of **Rs.57.23 lakhs**.
- ❖ DST grant received for **Rs.9,75,000/-** for organizing INSPIRE Internship Science Camp programme.
- ❖ Five International projects and 183 National projects have already been submitted to various funding agencies and are worth of **Rs.76.18 crores**, of which, One International and 77 National projects proposals worth about **Rs.35.55 crores** have been submitted to various funding agencies after the NAAC Peer Team visit.
- ❖ VISTAS has been recognized by Scientific and Industrial Research Organisations (SIROs) by DSIR, Govt. of India.
- ❖ Equipment worth of **Rs.1,50,45,648/-** have been purchased after the visit of NAAC Peer Team taking the total equipment worth of **Rs.9.64 crores**
- ❖ The University has an authorized IPR Centre created through a Project grant by Ministry of Communications and Information Technology, Govt. of India.

- ❖ Three On-line journals and one printed journal are published from VISTAS:
 - a) International Journal of Frontiers in Science and Technology (IJFST) published by School of Pharmaceutical Sciences. (www.ijfstonline.org)
 - b) Vels International Journal of Mechanical Engineering published by School of Engineering (www.vjmeonline.org)
 - c) Vels Management Journal (Half yearly journal) being published by School of Management Studies. (www.vmjonline.org)

- ❖ 1,02,591 Books, 1,37,717 e.books, 343 research journals(print version) EBSCO, IEEE/IEL, ASME, ASCE, Bentham Science, ABI/Inform Global and making online access to over 12,381 research journals to facilitate quality teaching and research. Digital resources from EDX, Khan Academy, NDL, NPTEL, TED are also available.

- ❖ 62 Ph.Ds have been awarded since the NAAC Peer Team visit and making a total of 117 Ph.D., awards till date.

- ❖ We are pleased to state that, Mr.Gowrishankar, who was an incubatee of VISTAS during the period 2013 to 2014, who got the BIRAC Big grant, received the Best Start-up award given by the Technology Development Board, DST, Govt. of India on Technology Day (11.05.2017), from the Hon'ble President of India.

- ❖ M/s. ARCOMM Tech Solutions Pvt. Ltd., an incubated company of VISTAS, with the technical support of Dr.Arun Raaza, Deputy Director, CARD of VISTAS, have developed a Novel device, named ARCOMM Auto Controller, to reduce the power consumption. This device was initially installed at ATMs at Nungambakkam, Chennai and proved its efficient working by conserving 8-10 units of electricity per day per ATM. Following this success, now this device is deployed, in over 200+ SBI ATMs in and around Chennai. The inventor of the device is appreciated and honoured by State Bank of India for energy conservation.

- ❖ One of our Mechanical Engineering Students, Mr.Sreeraj, with the support of his project guide Dr.M.Chandrasekaran, has developed a device using which the fuel consumption can be minimised in automobiles. This is a part of the project to be submitted by the student for his B.E., degree. A proposal based on the concept, has been submitted to Indian Oil Corporation for a start-up funding. The Indian oil corporation has accepted the proposal and called for a discussion on the 21st June 2017.

- ❖ The IIT-Mumbai and IIT-Kharagpur programmes have helped the teachers and researchers to improve the quality of teaching and research. More number of research publications in indexed journal have come out because of attending these workshops.

Problems Encountered and Resources Required

- The resource constraint is the major problem that prevents the university to embark upon bigger research projects as the funding agencies have provided grants only to a limited extent.
- The trained senior research faculties to guide the young researchers are not available in adequate number especially in Engineering and Management disciplines.
- The additional research equipment required for research purpose has to be met only from local resources.

6. Notes

In spite of all these constraints, the university has made great strides in research and development. The university has already made Seven Transfer of Technologies to the industries and one such innovation has been demonstrated to the Govt. of India on its invitation. Though the University is young one it has demonstrated its robustness by making 39 inventions and filing 35 patents. All filed patents have been published and three patents are on the verge of granting patents.

Best Practice – 2

1. Title of the Practice

Implementation of Automation

2. Objectives of the Practice

- To manage attendance of faculty, non-teaching staff and students
- To facilitate all financial transactions.
- To communicate with parents and other stakeholders through ICT applications.
- To help in analysis of performance of students online and take suitable measures.
- To enhance efficiency and have complete transparency

3. The Context

In Automation, ICT has entered in every aspects of academic administration. The university has taken steps to develop in-house applications in many areas of Administration, Finance, Management Information System, Examination system and in augmentation of library and learning resources.

4. The Practice

- The university has created ICT infrastructure for ensuring access to students, faculty, researchers and all administrative activities. The campus is having Wi-Fi connectivity supported by National Knowledge Network. All class rooms and laboratories have internet facilities and class rooms are equipped with LCD Projectors, PCs and in a few rooms Smart Boards.
- The Automation is implemented in Admission, Examination, Internal Quality Assurance Cell, Administration, Finance and Accounts, Academic Communication and Library.
- Biometric systems has been introduced for the employees of the university.
- All Admissions are done transparently - online applications, online registrations are in practice.
- The helpdesk is provided at the counselling premises to assist the students in all necessary required information.

- The examination section is fully computerized and automation is practiced from registration of students for examination, to publication of results and issue of grade certificates.
- The IQAC obtains an online assessment of the teachers by the outgoing students. The Vice chancellor counsels the teachers and offers suggestions to improve.
- Registrar communicates to all the departments on all academic and administrative matter only through e.mail.
- The university has introduced e.governance in most of the departments. Each faculty is given a separate e.mail account in the name of the university and all the officers of the university are provided with e.mail facilities and are interlinked through their mobile network to speed of the day to day activities under the e.governance.
- The Finance and Account department is under automation. Presently transactions such as rising of pay bills of employees and payments have been computerized.
- Payments of remuneration, bills, and both internal and external examiners are through net banking.
- Transfer of grants from funding agencies is through RTGS/NEFT.
- All payments for purchases are made through RTGS.
- Academic branch has dynamic website providing information about all courses, infrastructures, facilities available, fees structure, etc.,

Library Automation

University has a central library situated and easily assessable to all the departments within the campus. The Library has text books, reference books, general books, reports, back volume of journals, M.Phil and Ph.D., dissertation and e.documents.

For the well-being of the stakeholders, the Library Committee has taken the following efforts as significant initiatives.

- OPAC (Online Public Access Catalogue)
- Automated Book Circulation.
- Issue of Barcode Identity Card to the students for ease of access in Library Book Loan
- A New Library building as a part of the expansion.

- Air-Conditioned, proper ventilation, good ambience and separate lounge area for pleasant reading.
- Implementation of Touch Screen Facility for the students to develop the Interactive User Interface.
- User Orientation
- Information Literacy Training Programmes for staff and students
- Special Orientation/ Blended Learning Training Classes on Online Resources.
- Content Alert Service
- Article Alert Service
- SDI (Selective Dissemination of Information) Service
- CAS (Current Awareness Service)
- Provision of Inter-Library Loan facility.
- Spacious Reprographic Section with Scanning and printing facility
- Establishment of Knowledge Resource Centre and Audio Video/Virtual Learning Centre in the library which is an inevitable learning resource to promote and develop the institution's resource not only in inside the campus but also from outside the campus too.
- Associate Member of e-ShodhSindhu, DIGITAL LIBRARY CONSORTIUM through INFLIBNET.
- Providing orientations and indulging faculties and students to take part in resources under MHRD guidelines such as – INFLIBNET – e-PG Pathsala, e-ShodhSindhu, Shodhganga, NPTEL, National Digital Library (NDL), CEC and SWAYAM.
- The library is computerized, automatic and provides all the services given above including digital resources.

Access system

The Central Library is automated by using Library Management Software **LIBGENIE**, Vital Functions like Book Circulation, User Registration, Transaction Details, Subject wise report generation and Stock Verification are carried out by this software. Bibliography of documents are also created and render information through OPAC by this Library Management Software, almost all the housekeeping operation modules are automated and computerized.

Library holds 17 Packages as an Electronic Resource Management for e-journals where a patron can use such databases via in their respective URLs to find out the e-journals in various disciplines

In Circulation section, book issues and returns are computerized.

ID cards are issued to various categories of user's viz., Students, Research Scholars and Faculty Members.

Users have informed automatically through SMS to their mobile numbers about book transactions made by them and other events of the library.

Library Website:

A separate library website (<http://velsunivlib.wixsite.com/vistaslibrary>) provides an overview of the library covering brief history, Mission and Vision, Library holdings such as Print and Online, Services provided, Rules and Regulations, it also provides link to access subscribed library resources like online journals, DELNET, Shodhganga, e-Shodhsindhu, NDL, INFLIBNET etc.,

A separate library subject Gateway webportal (<https://www.velslibrarysubjectgateway.com/>) which helps to provide information and educational learning resource for each and every school in university in an organized manner. It includes Open Source Online journals, e.Books, Fellowships, Soft skills, Career portal, Repositories, Resources coming under the guidelines of MHRD such as SWAYAM, e-PG Pathsala, and Consortium for Educational Communication, NPTEL, Shodhganga, e-Shodhsindhu and National Digital Library can be accessed via this portal anywhere at any time.

In-house/remote access to e-publications

E – Publications can be accessed from anywhere in the campus including hostels. 60 computers has been specially housed in digital library equipped with internet and printing facility for accessing and downloading e-resources. A special server with Digital Library Software (Greenstone) and Institutional Repository Software (D space) has been installed and running successfully for accessing Question Banks, Open Source e-books and e-journals. The subject gateway portal which is designed and developed by the library holds resources such as e-Journals, e-Books, Repositories, etc. can be access remotely anywhere at any time, also, e-Journals form EBSCO database can be accessed outside the campus via app in android devices.

Institutional Repository

Library is having D-Space an Institutional Repository software which in-house the Faculty Publications, Question Banks, e- Books Collections and a gallery which shows the colorful moment of University Functions as well as important happenings.

Content management system for e-learning

Library also plans to develop content management system to provide enhanced access to remote and local electronic resources.

Participation in resource sharing networks/consortia (like INFLIBNET)

University Library has an institutional membership to several organizations like

- Through INFLIBNET institutional membership under the e- ShodhSindhu DIGITAL LIBRARY CONSORTIUM, associate member of e.ShodhSindhu.
- The library can access World e-Book Library (WEL) and South Asia Archive (SAA) through Institutional Membership under the e- ShodhSindhu.
- The University has signed MoU with INFLIBNET Centre, Ahmadabad for “Shodhganga ETD portal”. It facilitates submission and hosting of Indian ETDs by submitting electronic version of Ph.D dissertations, which will be available to entire scholarly community in open access mode. Presently 62 dissertations from the University are made available on INFLIBNET Shodhganga ETD portal.

5. Evidence of Success

Automation has improved efficiency, created transparency, and as resulted in more effective administration. The Library automation has ended in user-friendly and the automation in the Office of Controller of Examinations has created confidence among the stakeholders and made possible to publish results within three weeks after the completion of last exam. The automation in Accounts and Finance has fallen in line with the present policy of Government namely Digital payments.

6. Problems Encountered and Resources Required

- As a Self-financing institution, finance is the major constraint.
- Continued availability of network is another big problem
- Sometimes lack of expertise in solving the problems given by network and computers add to the problems.

7. Notes

Easy access to information relating to examination, payments, attendance of the students and the arrival and departure of faculty members. This has helped in strict monitoring and control.