VIT®

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

SDG 8 Decent Work and Economic Growth

Annual Report 2018-19

8 DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Vellore Institute of Technology
Vellore – 632014
Tamil Nadu, India
www.vit.ac.in

GOAL 8: Affordable and Clean Energy…

Preamble

India as a country has embarked on the journey to attain SDG 8 Decent Work and Economic growth for all. In tune with that, Vellore Institute of Technology has been focusing on this SDG and has rolled out many initiatives and schemes to contribute to this SDG. As an educational institution, we strive to ensure that all the students are provided with quality education, thereby ensuring their employment. The faculty and staff are provided with an ambience which enables them to work and prosper in their career. The local community is also taken into consideration and several steps are taken to uplift their life.

Policies / Major decisions taken regarding the SDG

- Implementation of Seventh pay commission recommendations
- Health Insurance schemes for employees
- Promoting an innovation ecosystem in the institution
- To introduce new courses and programmes in consultation with industry to enhance the employability of the students
- Encourage students to participate in government initiated Programmes like Make in India, Start up India, Skill India, and Digital India, thereby creating employment and entrepreneurship opportunities for them
- New research centres that focus on innovative technologies
- Empowering women by making them take up leadership roles
- Training programmes for local community, mostly women through UHET
- Merit based scholarships for students
- VIT STARS Scheme helps students from under privileged background to achieve what they deserve by giving them 100% fee waiver for their academic and hostel facilities including basic medical expenses.

Academic Details pertaining to the SDG

The following new programmes were introduced in consultation with industry

- B.Tech. ECE with specialization in Sensors and Wearable Technologies
- B.Tech. Computer Science and Engineering with Specialization in Information Security
- B.Des. (Industrial Design)
- M.Tech. Construction Technology and Management
- M.Tech. Computer Science and Engineering with Specialization in Big Data Analytics
- M.Tech. Computer Science and Engineering with Specialisation in Information Security

Following courses with focus on innovation, entrepreneurship, IPR were offered as electives.

- Gender, Culture and Technology
- Environmental and Sustainability Assessment
- Impact of Information Systems on Society
- Technological Change and Entrepreneurship
- Intellectual Property Rights
- Business Regulatory Framework For Start-ups
- Political Economy of Globalization
- Sustainable Business Models
- Entrepreneurship Development, Business Communication and IPR
- Investment Analysis and Portfolio Management
- Contemporary Legal Framework for Business
- Several courses that focus on enhancing the soft skills were also introduced as part of the curriculum.

Major events organised Conferences / Workshops / Symposium, Various workshops, training programs were organised to enhance the technical design and analytical skills of the student community

- WOMEN TECHIES 2019
- BUILDING A CHAT BOT
- INOVIT2019
- TECHNOSCAPE 18
- SCRAP METAL SCULPTURE WORKSHOP
- WORKSHOP ON ARTIFICIAL INTELLIGENCE IN AGRICULTURE
- MAKE A THON ON DIGITAL LOGIC AND MICROPROCESSOR
- WOMEN IN INFORMATION TECHNOLOGY INTERNATIONAL SUMMIT
- BUILDING RELIABLE SPACE SYSTEMS
- CODESPACE 2019
- AMAZON WEB SERVICES HANDS ON TRAINING
- R AND D TO COMMERCIALIZATION
- ESSENTIAL LAB SKILLS
- INIAC IDEATHON
- REAL TIME APPLICATIONS OF LABVIEW IN INDUSTRIES
- STUDENT ENRICHMENT PROGRAM ON INDUSTRY EXPECTATIONS FROM STUDENTS
- OUT BOUND TRAINING PROGRAMME ON ENHANCING LEADERSHIP AND TEAM BUILDING SKILLS
- 3D PRINTING WORKSHOP WITH HANDS ON TRAINING
- IT INDUSTRY 4 NEW AGE COMPUTING
- HONEYWELL AUTOMATION CHALLENGE 2019
- OPPORTUNITIES AHEAD
- SKILL DEVELOPMENT
- WEBSITE IN A DAY WEB A THON

Lectures organised to enhance students' awareness

- HOW TO CRACK COMPETITIVE EXAMINATIONS
- CAREER ADVANCEMENT PROGRAM
- EMPLOYABILITY AND LIFE SKILLS

Extension activities relevant to SDG 8

The Centre for Sustainable Rural Development and Research Studies (CSRD & RS) organised several extension activities for the benefit of local community

- LOAN MELA 2018-19 – TRIBAL DEVELOPMENT
- A Mobile App for Visually Challenged people – an initiative by VIT Digital learning – Employment. Date: 30.01.2018 to 02.03.2018
- GV School Development Programme- Government School Desk and Benches donation program. Date: 09.03.2018
- Thiran Thalir Thittam – Govt. School Students in Vellore District. Date: 27.08.2018
- Agri EXPO – 2018. Date: 08.10.2018 to 09.10.2018
- NEW ENTREPRENEUR CUM ENTERPRISE DEVELOPMENT SCHEME (NEEDS). Date: 18.11.2018 to 19.12.2018

- NEW ENTREPRENEUR CUM ENTERPRISE DEVELOPMENT SCHEME (NEEDS)– ENTREPRENEURSHIP DEVELOPMENT PROGRAMME-2019. Date: 18.02.2019 to 08.03.2019

VIT placement Consortium

As part of its social outreach programme, VIT has formed a Placement Consortium to help the engineering and science students of neighbouring colleges. Students from these colleges in the nearby towns of Villupuram, Vellore, Ranipettai, Kancheepuram, Chittoor, Tirupati, Kuppam and Puttur benefit immensely from this Consortium. Reputed companies like Wipro, Cognizant, Syntel, Siemens, Accenture, IBM, HCL, Sasken, CSC, Hexaware, Birlasoft, Keane, iGate, i-flex, AIG Software, etc., have conducted campus interviews and recruited students through the Consortium.

VIT also helps Science (B.Sc/BCA) students of neighbouring colleges in finding placements.

Companies like Accenture, TCS, Cognizant, Wipro, Infosys, igate, CSC, HCL, HCL Comnet, Oracle Financials and Satyam etc., have conducted combined interviews at VIT and recruited these students.

VIT- Technology Business Incubator (VIT-TBI)

VITTBI, incorporated in 2003, is registered as a not-for-profit society, which helps technology start-up businesses with all the necessary resources / support that the start-up needs to evolve and grow as a mature business. Currently, VITTBI has active programs supported by DST, BIRAC (BioNEST) and MeitY (TIDE 2.0) incubation centre. VITTBI supports Innovative Technology startups with access to knowledge, funding, infrastructure, mentoring and network.

Six week Technology Entrepreneurship Development Program on 'Food & Agro Processing' was organized between 13th of Nov and 24th of Dec 2019 under the DST-NIMAT project. About 20 participants from the region took part in the training.

A 2-week Faculty Development Program on Entrepreneurship, Innovation and Incubation was organized under the DST-NIMAT project between 25th Nov and 7th Dec 2019. About 22 faculty members from VIT and other institutions attended the training program.

Short term training on Western Blotting, UPLC, 2Dimensional electrophoresis (IEF) and basics in laboratory animal handling techniques was conducted for external student participants between 25th Nov and 29th Nov 2019 in the BioNEST Bio Incubation Facility of VITTBI.

Research Publications –SDG 8

Research papers were published by faculty and students in the areas related to promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Publications   : 29

Citations   : 100

Tangible Outcomes Including Awards

- 2470 students have been placed through on campus recruitment with 690 companies visiting the institution
- Average CTC is 6.05 lakhs
- 1926 students had been provided with industry internships
- 435 Female faculty and 119 female staff are on the employee roll, out of 2324 faculty and staff
- Alfaleus Technologies Pvt. Ltd., a VIT alum startup under incubation in VITTBI won a cash award of Rs.10 Lakhs and was adjudged as one of the top two Indian companies at Swissnex Academia Industrial Training (AIT) held in Zurich, Switzerland in April 2019

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1. Preamble

The following is a comprehensive report on 'SDG 8 – Decent Work and Economic Growth' for Vellore Institute of Technology Chennai (VIT Chennai). SDG 8 deals with sustainable and fair economic growth that enhances the societies to create necessary conditions that allow people to have quality jobs which invariably stimulate the economy while not harming the environment. VIT Chennai focuses primarily on the decent work culture of the employees which includes providing sophisticated infrastructure, a comfortable and benevolent work environment, and enhancing the prosperity of employees.

2. Policies/Major decisions regarding SDG 8

The policies or major decisions regarding SDG 8 are elucidated as follows.

2.1 Code of Conduct

The well-established "Code of Conduct for Employee" is established and demonstration of the same is given to all the newly joined employees via Faculty Induction Programs, as well as the existing employees (https://chennai.vit.ac.in/files/Conduct-Rules-for-Employees.pdf).

2.2 General Amenities

Fig.1 – Canteen and Food Court Complex

The general campus amenities are aimed to make a very student feel VIT a very lively, fun-filled, and resourceful community to enrich their erudite years. Some of the major general campus facilities that are available and aid in providing a good ambience for an enjoyable learning experience at VIT are listed below.

Canteens and food courts provide easier access to food and refreshments

- Health centre with in-patient facility and ambulances provide the required 24×7 health care facility
- Transport facilities for day scholar students, staff and faculty members
- Walkways for safe, easy and congestion-free movement of students inside the campus
- Banks and ATM facilities
- Electrical power backup which is provided by standby power generators
- Guesthouse for the convenience of the visiting family members of students with online booking facility
- Gymnasium for male and female students with state-of-the-art equipment
- Sewage Treatment Plant

Fig.2 – Canteen (Interior View)   **Fig.3 – Bank & ATM facility**

By bringing clubs, chapters and college festivals, students are not simply revealed to a competitive environment inside the campus but also with reputed universities and colleges in and around the country.

2.3 Smart Classrooms

The classrooms are well designed rooms that incorporate everything needed for a pleasant learning atmosphere. The wide spacious classrooms contain a whiteboard and also a projector that is used for teaching so a professor can switch to different modes of teaching as and when required so the teaching are not monotonous and the lectures are put across in the best way possible. This hi-tech equipment enables our faculty to conduct classes in a way that enable students to make use of every available resource from one point at the click of a button. These classrooms are also often used for seminars and events from time to time. Video capturing facilities are also available for enhancing the teaching-learning process.

Fig.4 – Smart Classroom (Interior View)

Fig.5 – Video capturing facility

2.4 Salary and Recruitment/Promotion Norms

The salaries and allowances of the regular faculty and staff members are paid as the Government norms. High standard and well-established norms are set for the recruitment of the employees and the promotion of the existing employees.

2.5 Academic Staff College (ASC)

Academic Staff College (ASC) is dedicated to creating a culture of academic excellence and conducting faculty development activities for all our schools and centres at VIT Chennai. ASC conducts regular dialogue with different stakeholders of the institute and coordinate with schools and centres towards achieving a decent and knowledgeable work environment. ASC network with international resource persons and universities as well as industry experts and invite the best resource persons to deliver lectures and workshops. ASC helps our faculty members and staff members stay updated with the latest developments in teaching, research and technology and thus to create a world-class learning environment for the students.

2.6 Fully Flexible Credit System (FFCS)

In the continuous pursuit of academic excellence and creating a student-friendly learning environment, VIT introduced the Fully Flexible Credit System (Shortly referred

to as FFCS). FFCS is a way in which students have complete freedom in tailoring their course and in a way they wish. It accommodates the wants and needs of the entire student community. With this system, a student can prepare his/her own timetable with the specific courses he/she intends to do in that semester along with the timings of classes and choice of professors. Learning has never been this fun. Students have the flexibility to pursue their other interests in sports or club activities and scheduling of classes will take it along the way. It is a beneficial system that is tailor-made to suit all the kinds of students with all learning needs, whether someone wishes to complete subjects early or pursue subjects of the other branches for acquiring a Minor/Honours degree. Also, this system ensures offerings of subjects from all disciplines, encouraging students to pursue multiple interests and develop holistically. The salient features of FFCS are as follows:

- *Choice in the order of selection of courses for each semester*

- *Choice in the timings/time slots in the selection of courses*

- *Choice in the selection of number of courses per semester*

- *Choice of preparing his/her own Timetable and Academic Plan*

- *Balanced curriculum with engineering, science, humanities and management courses*

- *Ample opportunities to do inter-disciplinary courses*

- *Soft on slow learners by offering important/common courses in all semesters*

- *Optional Summer/Intersession semester to do courses*

- *Opportunity of undergraduate research experience*

- *Value addition with double Major/Minor/Honours option*

- *Branch change option in B.Tech. at the end of first year*

2.7 Internal Committees

The following are some of the internal committees to perform the courteous task within the organization to enhance quality and a decent work environment.

2.7.1 Internal Complaints Committee

If any woman faculty, staff, or girl student has any grievance, including any kind of harassment, the same can be brought to the notice of the Convenor or any of the Committee Members of Internal Complaints Committee for necessary action and redressal. Any physical/mental harassment towards fellow students including ragging, quarrelling, using abusive language and violent behaviour is strictly prohibited.

2.7.2 Intellectual Property Rights Cell

Intellectual Property Rights Cell (IPRC) is being formed and the objective is to promote patenting. The following members will constitute the IPRC.

1. Dean, Sponsored Research, ex-Officio – Convener
2. Dr. Sugumaran. V – Member
3. Dr. John Kennedy. L –Member

2.7.3 Vigilance Cell

A 'Vigilance cell' is being formed and the objective of this cell is to be on the alert of any misconduct/unwanted activities/risks and take preventive measures. The following members will be part of the team:

1. Dr. R. Venkatesh – Convener
2. Dr. S. Elavenil – Member

2.8 Medical Insurances for the employees

The Management is providing mediclaim coverage for the employees and their family for a sum of Rs. 2 Lakhs, and the premium for 2 lakhs is borne by VIT Chennai.

3. Academic details regarding SDG 8

The following courses are offered as part of B.Tech and BBA programs respectively at VIT Chennai.

- *MGT1003 – Economic Analysis for Managers*
- *MGT1024 – Organizational Behaviour*
- *CLE2022 – Economics and Business Finance for Civil Engineer*
- *HUM1021- Ethics and Values*
- *HUM1036 - Engineering Economics and Decision Analysis*

4. Major Events Organized

4.1 Indian Economic Association

Forty-three faculty members of VIT Chennai are members of the prestigious Indian Economic Association (IEA). IEA is the oldest, largest and most prestigious organization of professional economists and policymakers in India. Established in 1917 by Professors Percey Anstey, Hamilton and Gilbert Slater of Bombay, Calcutta, and Madras Universities. It is now celebrating its Centenary Second Conference in 2018. More than 7000 members of the Association represent teaching, research and policy studies from all parts of the country. The Association also has a good number of members from abroad. Dr Manmohan Singh, Former Prime Minister of India, and Prof. Amartya Sen, Nobel Laureate, have served as the Presidents of the Indian Economic Association. Former Presidents of the Association include eminent Economists like Dr Gilbert Slater and Percy Anstey, (both from London School of Economics), C. J. Hamilton, Sir M. Visvesvaraya, B. V. Narayanaswamy Naidu, P. S. Lokanathan, C. N. Vakil and R. Balakrishna (founders of Indian Economic Journal), D. R. Gadgil, V.K.R.V.Rao, I. G. Patel, P. R. Brahmananda, K. N. Raj, V. EVI. Dandekar, Malcolm S. Adiseshaiah, Bhabatosh Datta, Vedagiri Shanmugasundaram, Gautham Mathur, S. Chakravarty, D.L. Narayana, Alakh Ghosh, C. T. Kurien, Raj Kumar Sen, C. Rangarajan, A. M. Khusro, V. R. Panchamukhi, Raja J. Chelliah, D. S. Awasthi, A. K. Sinha, Yasodha Shanmugasundaram, K.C.Reddy, C.H. Hanumantha Rao, Sukhadeo Thorat, Montek Singh Ahluwalia, B. L. Mungekar, L. K. MohanRao, Kaushik Basu and many more during the last 100 years. IEA Members of VIT Chennai is responsible for conducting IEA events at VIT Chennai, and participate in the IEA Conferences held across the country.

4.2 Faculty training

Faculty and staff members are given adequate and periodic training on Outcome-Based Education (OBE), other teaching-learning processes through Academic Staff College (ASC).

S. No.	Name of the Program	From	To	No. of Participants
1.	MOODLE (Assignments, Quiz and Grading)	22-08-2017	22-08-2017	67
2.	Strategies to Connect with Millennials	23-08-2017	23-08-2017	54
3.	Power of Punctuation	23-08-2017	23-08-2017	50
4.	Integration of AppCOE with R-Pi	23-08-2017	23-08-2017	11
5.	Anechoic Chamber Training	06-10-2017	06-10-2017	38
6.	Basics of Patenting Inventions and Innovations	25-10-2017	25-10-2017	31
7.	Microsoft Surface in Education	27-10-2017	27-10-2017	41
8.	Use of Team Building exercises for enabling learning with fun	18-12-2017	18-12-2017	35
9.	Design Thinking Approach to Solve Social Problems	19-12-2017	19-12-2017	41
10.	Socialness - a keyword for Success	20-12-2017	20-12-2017	34
11.	Use of Team Building exercises for enabling learning with fun	21-12-2017	21-12-2017	31
12.	ALOHA – A Life Of Happiness and fulfilment	22-12-2017	22-12-2017	51
13.	Operating System- A Kernel Perspective	13-11-2017	14-11-2017	16
14.	Hands on training on TI CC3200	20-12-2017	20-12-2017	20
15.	High Impact Presentation Skills	29-11-2017	30-11-2017	19
16.	XRD Data Analysis	16-03-2018	17-03-2018	18
17.	COMSOL Training on Electrical Modules	24-01-2018	24-01-2018	33
18.	Fun and Happiness in Work	05-03-2018	05-03-2018	52

4.3. Lectures organized relevant to SDG 8

- A Guest Lecture is organized by Dr. Sallena B, Dr. Prakash B, and Dr. Prasanna J on "Campus Placements – The Success Stories" on 29th August 2017 for the students of School of Computing Science and Engineering. This is an interactive session where students get to know about different opportunities and super-dream offers in their respective field of interest.

Fig.6 – Digital invitation of the lecture "Campus Placements – The Success Stories"

- A Guest Lecture is organized by Dr. M. Poongodi, and Mr. Rajesh, SCOPE on "Cybersecurity" on 11-09-2017. The resource person is Mr. Ravi Shankar R, Assistant Vice President, K7 Security Academy, K7 Computing. Various facets of cyber-security is elucidated in a greater detail during the lecture. A brief overview of security features of K7 Computing are discussed.

Fig.7 – Photograph taken during the Lecture on "Cybersecurity"

- A Guest Lecture is organized by Dr. Tulasi Prasad and Dr. Nithyanandam P, SCOPE on "Forgery Detection & its Security in Document and IMEI No. Images" on 11th September 2018 for the students of School of Computing Science and Engineering. The resource person for this lecture is Dr. Shivakumara Palaiahnakote, Professor, University of Malaya, Malaysia. Sixty students attended this session.

Fig.8 – Photographs taken during the Lecture on "Forgery Detection & its Security in Document and IMEI No. Images"

A national level seminar on "Quality Enhancement in Teaching Methodology in Higher Education for Prospective Employability" is organized by Internal Quality Assurance Cell (IQAC) for the benefit of all the faculty members at VIT Chennai on 18/04/2018.

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