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**INSTITUTIONAL ASSESSMENT AND ACCREDITATION
(Effective from July 2017)**

Accreditation - (Cycle -1)

**PEER TEAM REPORT ON
INSTITUTIONAL ACCREDITATION OF
SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY,
BANGALORE
C-1327
Karnataka
Bengaluru
562157**

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission
P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA

Section I:GENERAL INFORMATION

1.Name & Address of the institution:	SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY, BANGALORE Bengaluru Karnataka 562157
2.Year of Establishment	1986
3.Current Academic Activities at the Institution(Numbers):	
• Faculties/Schools:	-
• Departments/Centres:	3

• Programmes/Course offered:	14
• Permanent Faculty Members:	195
• Permanent Support Staff:	145
• Students:	3269
4.Three major features in the institutional Context (As perceived by the Peer Team):	1. Private Co-educational Institution with UGC 2(f) status 2. Affiliated to Visvesvarya Technological University(VTU) 3. Well spread and green campus in a metro location
5.Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	Visit Date From : 06-04-2018 Visit Date To : 07-04-2018
6.Composition of Peer Team which undertook the on site visit:	
Chairman:	Sandeep Sancheti
Member Co - ordinator:	Satish Chandra Sharma
Member:	VINAYAK N. SHET
NAAC Co - ordinator:	Dr. Shyam Singh Inda

Section II:CRITERION WISE ANALYSIS

*Observations (Strengths and/or Weaknesses) on each qualitative metrics of the key Indicator under the respective criterion***(This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)**

Criterion1 - Curricular Aspects (Key Indicator and Qualitative Metrics(QIM) in Criterion1)

1.1	Curricular Planning and Implementation
1.1.1 QIM	The institution ensures effective curriculum delivery through a well planned and documented process
1.2	Academic Flexibility
1.3	Curriculum Enrichment
1.3.1 QIM	Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum
1.4	Feedback System

Qualitative analysis of Criterion 1

Sir M Visvesvaraya Institute of Technology was established in the year 1986 by Sri Krishnadevaraya Educational Trust and is located on NH7 near air force station in Bangalore. The Curriculum is designed by VTU, Belagavi. The curriculum goals are implemented through classroom teaching. The Institute offers 09 UG and 05 PG courses in engineering, computer application and management streams. Syllabus of the subjects are specified by VTU. Faculties prepare lesson plans based on affiliating university syllabus according to academic calendar of events to complete curriculum. Faculty members maintain course file containing details of lesson plans, notes of lessons, question bank and performance data of students. Head of department is responsible to manage the academic activities of the department as per specified schedule. The HOD also monitors class schedule through a master timetable. Internal assessments are conducted as per schedule of the affiliating university. Adequate learning materials are available through power point presentation, prototype models for demo classes. The Institute organises guest lectures, workshops, field work and short term projects.

The Institute imparts education to all sections of the society irrespective of caste, creed and gender. The Institute caters to the need of weaker sections and economically backward classes as per VTU rules. However, there is lack of international students on their rolls. The Institute offers a compulsory subject related to environment studies to include environmental awareness, climate change etc. Besides this, the Eco clubs and NSS units offer a platform for inducing awareness regarding environment. The Institute imparts knowledge about constitution of India, professional ethics, and Human rights. Feedback mechanism regarding students, teachers, curriculum is in place. Several stakeholders including current students strongly opined for better opportunities to have long term internships in collaboration with the industries. Similarly the requirement for better hands on learning and skilling including better equipped laboratories were also desired.

Criterion2 - Teaching-learning and Evaluation (Key Indicator and Qualitative Metrics(QIM) in Criterion2)

2.1	Student Enrollment and Profile
2.2	Catering to Student Diversity
2.2.1 QIM	The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners
2.3	Teaching- Learning Process
2.3.1 QIM	Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences
2.3.4 QIM	Innovation and creativity in teaching-learning
2.4	Teacher Profile and Quality
2.5	Evaluation Process and Reforms

2.5.1 QIM	Reforms in Continuous Internal Evaluation(CIE) system at the institutional level
2.5.2 QIM	Mechanism of internal assessment is transparent and robust in terms of frequency and variety
2.5.3 QIM	Mechanism to deal with examination related grievances is transparent, time-bound and efficient
2.5.4 QIM	The institution adheres to the academic calendar for the conduct of CIE
2.6	<i>Student Performance and Learning Outcomes</i>
2.6.1 QIM	Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students
2.6.2 QIM	Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution
2.7	<i>Student Satisfaction Survey</i>

Qualitative analysis of Criterion 2

The Institute offers admission as per the VTU /State Government policy to the students belonging to various categories. The Institute follows a Local Guardian Scheme (LG) and each faculty member is allotted to 20 students to act as local guardian. Further, the institution has a Student Information Portal (SIP) to monitor the student progress. Slow learners are identified through interactive classroom teaching and discussions. For the identified slow learners, the Institute provides tutorial and remedial classes to improve their academic performance. Advance learners are also identified and involved in various project activities. The Institute provides student centric learning by supporting students at various levels. Students are encouraged to contribute teaching activities to improve written skills, seminars/guest lectures/conferences. Students are encouraged to become a member of professional bodies. But use of self-learning through MOOCs, NPTEL etc. is not adequately promoted or used.

Students involve themselves in innovation and creative activities such as Vukan motor vehicle for formula race, unmanned aviation vehicles, robotics. Apart from class room interactions, the students undergo inplant training, visit industries, present technical papers and carry out in house projects etc. such that class room learning is effectively and innovatively augmented. Continuous Internal Evaluation (CIE) system is in place. The Institute follows a planned schedule as per the affiliating university guidelines regarding internal tests and other activities. The Institute has a QPDS (Question Paper Delivery System) and a well-coordinated examination system is in place. The Institute has a transparent internal assessment and evaluation. Students are allowed to discuss the exam performances with concerned teachers. The performance indicators of students are entered in (SIS) system. The Institute has a system in place for examination related grievances both at Institute and University level.

Program outcomes, program specifics outcomes for all programmes are displayed on the website and communicated to students. Program Outcomes (PO) and Program Specific Outcomes(PSO) and their attainment is evaluated at the Institute level. The pass percentages of students is reasonably good and regularly produces rank holders. As VTU has a successful model for granting autonomy for affiliated institutions, the Sir MVIT should have attempted for it to seek higher degree of academic freedom to deliver courses more efficiently and in also in emerging disciplines.

Criterion3 - Research, Innovations and Extension (Key Indicator and Qualitative Metrics(QIM) in Criterion3)	
3.1	Resource Mobilization for Research
3.2	Innovation Ecosystem
3.2.1 QIM	Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge
3.3	Research Publications and Awards
3.4	Extension Activities
3.4.1 QIM	Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

3.5 Collaboration**Qualitative analysis of Criterion 3**

The Institute has created an Incubation centre named BIG (Biotechnology Ignition Grant) under the scheme of BIRAC Govt. of India. The other Incubation centre FNDR (Foundation for Neglected Disease Research) focuses on study dealing with Malaria and Tuberculosis. But such centres or activities are limited to only Bio-technology department and other departments are very limited in external project funding, incubation centres and general research support. Institute team INFERNO's car project and FUTURISTIC car project has successfully participated in Shell Eco Marathon Asia competition held in Manila and Singapore. The students have also participated in the activities such as Ashphalt Demons-Bike and Vulkan motors at various National/International events. The Institute has conducted a few workshops/seminars on IPR and Industry Academia Innovative practices.

Only 10% of the faculties possesses PhD qualifications however, some of them have started pursuing doctoral programmes in recent times. The institute has produced 7 PhDs from its efforts under taken under VTUs recognition as a identified research centre in certain disciplines. Further, the institute needs to augment its own internal funding research and innovation support as well as make concerted efforts to attract external funding. The Institution provides incentives to teachers in recognition to National/International awards won by them. The faculty of the Institute is engaged in research and publications activities. The research publication activities need to be boosted with focus on publications in international journals of repute.

The Institute is actively engaged in the community based pursuits through various units such as NSS, alumni association etc. Activities like tree plantation, blood donation camps, eye check-up camps, medical camps, free dental check-up, art of living, youth for Seva and Anti-tobacco awareness programmes are regularly organized. Environment protection programmes, drug abuse and anti-trafficking programmes are also arranged by the Institute. The Institute has some functional MOU's with nearby industries in Bangalore and has Texas instrument center of excellence for the embedded system.

**Criterion4 - Infrastructure and Learning Resources
(Key Indicator and Qualitative Metrics(QIM) in Criterion4)**

4.1	Physical Facilities
4.1.1 QIM	The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.
4.1.2 QIM	The institution has adequate facilities for sports, games (indoor, outdoor), gymnasium, yoga centre etc., and cultural activities
4.2	Library as a Learning Resource
4.2.1 QIM	Library is automated using Integrated Library Management System (ILMS)
4.2.2 QIM	Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

4.3	<i>IT Infrastructure</i>
4.3.1 QIM	Institution frequently updates its IT facilities including Wi-Fi
4.4	<i>Maintenance of Campus Infrastructure</i>
4.4.2 QIM	There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Qualitative analysis of Criterion 4

The Institute has adequate infrastructure facilities in terms of classrooms, tutorial rooms, laboratories, drawing halls, library and reading rooms and seminar halls. Number of classrooms and seminar hall are having ICT enabled facilities. The Institute has good hostels for boys and girls, outdoor sports, indoor sports, and gymnasium facilities at the campus. Around 30 acres play fields are available. The cricket field is well maintained and utilised by the Karnataka cricket association for their league tournaments. The Institute felicitates and award outstanding sports persons at college day celebrations. The students have won awards at various sports competitions of VTU. The Institute has also organised various intercollegiate tournaments. The Institute are encouraged to participate in various cultural activities on the campus under the cultural forum SUSAMKRITI. The Institute has an adequate facility in terms of library space with a seating capacity of 300 seats but the ambiance needs to be improved. Library functioning is automated with a software LIBOSOFT having sufficient titles and volumes with number of e-journals subscription, CD's/DVD's, etc. The library has a membership with DELNET, VTU consortium, British Library Bangalore, etc however the availability of E-books and print journals is very limited. Similarly, the library lacks availability of rare books and manu Scripts etc. Laboratory are adequate for regular teaching-learning requirement but does not have high end or the state of equipment to provide better technical exposure to students.

The student-computer ratio is adequate with required internet connectivity. The Institute has required number of computers well connected with internet. The Institute has Wi-Fi facility in the college campus for the students and faculty members. The facilities for e-content development such as virtual classrooms and studios are not available. Use of integrated ERP is not being made or is not visible. The Institute is spread over 133 acres of land and is well maintained, clean and green campus but the tapping of solar energy is meagre. Proper utilisation of financial resources are planned at the beginning of every financial year. All the financial transactions of the Institute are recorded and the financial procedures and dealings are audited periodically every year by the Auditors. The Institute has 2 Nos of diesel generators for power backup with an annual maintenance contract. There are No. of classrooms with Wi-Fi / LAN and 06 seminar halls with ICT enabled facilities.

Criterion 5 - Student Support and Progression (Key Indicator and Qualitative Metrics (QIM) in Criterion 5)

5.1	<i>Student Support</i>
5.2	<i>Student Progression</i>

5.3	<i>Student Participation and Activities</i>
5.3.2 QIM	Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution
5.4	<i>Alumni Engagement</i>
5.4.1 QIM	The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Qualitative analysis of Criterion 5

Government scholarships and freeships are available for the students belonging to SC, ST, OBC and students from the weaker sections. The average percentage of placement of outgoing students during the last 5 years is good but can be improved further. Student progression to pursue higher education is also good and properly supported. Institute provides carrier guidance, carrier counselling, soft skill development, personal counselling, bridge courses, Yoga and meditation to the students. Vocational education and training (VET) is provided to the students. Students of the Institute regularly qualify for GATE, GRE, TOEFL, civil/state government examinations.

Students of the Institute are encouraged to participate in national sports /cultural events and have won awards in different events but with limited financial support from the institute. Student council does not exist rather the student's representative are identified in each class which act as a bridge between students and HODs/Principal. Student take active participation in organising industrial trips, surveys, department workshops, circuit debugging, code debugging, gaming, mock parliament, technical/non-technical quiz and tests to improve their leadership skills and academic knowledge. However, the stake holders desired more inter departmental collaborations as well as more seminars. The Institute do have an alumni association which conducts regular meetings annually. Alumni are invited to interact with the students to deliver lectures, train students and enhance their employability. The Alumni corpus fund is meagre which needs to be expanded.

Criterion 6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrics(QIM) in Criterion 6)

6.1	<i>Institutional Vision and Leadership</i>
6.1.1 QIM	The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution
6.1.2 QIM	The institution practices decentralization and participative management
6.2	<i>Strategy Development and Deployment</i>
6.2.1 QIM	Perspective/Strategic plan and Deployment documents are available in the institution
6.2.2 QIM	Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

6.2.4 QIM	Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions
6.3	<i>Faculty Empowerment Strategies</i>
6.3.1 QIM	The institution has effective welfare measures for teaching and non-teaching staff
6.3.5 QIM	Institution has Performance Appraisal System for teaching and non-teaching staff
6.4	<i>Financial Management and Resource Mobilization</i>
6.4.1 QIM	Institution conducts internal and external financial audits regularly
6.4.3 QIM	Institutional strategies for mobilisation of funds and the optimal utilisation of resources
6.5	<i>Internal Quality Assurance System</i>
6.5.1 QIM	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes
6.5.2 QIM	The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms
6.5.5 QIM	Incremental improvements made during the preceding five years <i>(in case of first cycle)</i> Post accreditation quality initiatives <i>(second and subsequent cycles)</i>

Qualitative analysis of Criterion 6

The Institute has a well-defined vision, mission and quality policy with dynamic and involved management. The Institute practises participative management on the campus by encouraging the faculty to participate in decision making with the help of various committees but there is not enough delegation of financial or administrative powers. The inputs for various stakeholders are received and assessed are implemented. The Institute has a well-defined organisational structure. The faculty of the Institute is recruited as per norms and policy maintaining adequate student teacher ratio. The Institute has 25 various committee/cells working in tandem to enhance the proper functioning and quality of the Institute. The feedback in several ways are collected through computerised systems and are analysed. Optimum utilisation of all the available resources is carried out. The Institute has a performance appraisal system in place in order to ensure the effective teaching learning processes. The strategic plan is currently being developed for the institution.

Some notional support is provided to the faculty for participating conference/short term courses. The Institute take care of its employee through various welfare schemes such as maternity leave, Earned leave, casual leave, ESI, EPF, medical, loan facilities, residential quarters. However attracting and retaining senior faculty seems to be a challenge. The college encourages students to participate in various extension activities.

IQAC in the Institute was established in 2015 and plays a important role in the quality assurance of teaching learning process and other activities. Academic audit is conducted every semester. The IQAC also takes initiatives in carrying out the result analysis, monitors, quality check, verifies course material of faculty and plans calendar of events. Funds are collected from the fees as well as grant & received from non-government bodies, individual, philanthropists etc. The budgeting process needs more transparency with proper allocation for support to the R&D and entrepreneurship. The Institute has made several incremental development activities during last few years.

**Criterion7 - Institutional Values and Best Practices
(Key Indicator and Qualitative Metrics(QIM) in Criterion7)**

7.1	Institutional Values and Social Responsibilities
7.1.2 QIM	1. Institution shows gender sensitivity in providing facilities such as: <ol style="list-style-type: none"> 1. Safety and Security 2. Counselling 3. Common Room
7.1.5 QIM	Waste Management steps including: <ul style="list-style-type: none"> • Solid waste management • Liquid waste management • E-waste management
7.1.6 QIM	Rain water harvesting structures and utilization in the campus

7.1.7 QIM	Green Practices <ul style="list-style-type: none"> • Students, staff using <ol style="list-style-type: none"> a) Bicycles b) Public Transport c) Pedestrian friendly roads • Plastic-free campus • Paperless office • Green landscaping with trees and plants
7.1.18 QIM	Institution organizes national festivals and birth / death anniversaries of the great Indian personalities
7.1.19 QIM	The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions
7.2	<i>Best Practices</i>
7.2.1 QIM	Describe at least two institutional best practices (as per NAAC Format)
7.3	<i>Institutional Distinctiveness</i>
7.3.1 QIM	Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Qualitative analysis of Criterion 7

Reasonably good gender equity with around 30% girl students. The Institute conducted orientation programmes for girl students and has a centralised cell "SHAKTI" (women cell) of Sir MVIT specifically addressing the problems of girls students. There is a separate provision for amenities and basic facilities for ladies in the campus. Institute makes limited use of solar power to meet the campus requirements. Institute has taken several initiatives towards waste management such as for vegetable waste, dried leaves, dustbin, liquid/solid waste etc. Rain water harvesting arrangements are in place. Sewage treatment plant is effectively functioning in the college, recycled water is used for horticulture purpose. Vehicle movement is restricted to keep campus pollution free. Transport facilities for the students and staff is also available through number of collage buses. The college maintains its green ambience owing to tree plantations every year. Go green initiation is taken up by NSS, eco club and Nisarga. Nearly 1/3rd of the campus area is covered by trees to maintain the eco system. Provision of light, ramps/rails, scribes for examination and physical facilities are in place for differently abled persons. Anti-Ragging committee is in place in the Institute. The Institute has facilities such as ATM, canteen, shops, dispensary etc.

The Institute celebrates National events on regular basis. The institute maintains a good degree of transparency in its dealings with students i.e. internal marks, assessments, placements hostel allocation etc. The Institute has best practices of local guardian scheme i.e. "Improvement of student – teacher relationship" and gold medal and cash awards for rank holders. Being an affiliated institution, it has focused on student placement and has achieved good results in number of placements.

Section III:OVERALL ANALYSIS (based on Institutional strengths.Weaknesses,Opportunities & Challenges(SWOC)(up to 500 words))

Overall Analysis

Sir MVIT campus is spread over 133 acres of land. The Institute management comprises of well-educated group of persons to provide a vibrant leadership. The Institute has a good infrastructure facilities and offers a courses in major disciplines of engineering. The college has been able to provide good infrastructure facilities for hostels as well as indoor and outdoor sports. The upkeep of the campus is very good and is properly maintained. The Institute has a good automated library with good number of books but less number of print journals and E-Books e-subscription of journals. The upkeep of the campus is very good and is properly maintained. More scholarships support should be provided to attract brighter students as well as add diversity and have a pan India student presence.

The students of Institute do take part in a lot of cultural activities and other extension activities at national level and have won awards. The Institute should make efforts in providing full employability to students with good CTC. In order to cope with competition from the other colleges, the Institute must develop an edge over other in terms of more R & D activities and consultancy services, Similarly innovation entrepreneurship and incubation should also be strengthened. Remedial classes for the slow learners must be more proactive. Dedicated efforts should be made to attract and retain competent faculty with Ph.D. qualifications. Faculty needs to be motivated to publish high quality research articles in reputed journals and seek external funding for infrastructure augmentation and R&D support. Initiate research more pro actively by supporting schemes like research seed grant, faculty internship in industry etc.

Section IV:Recommendations for Quality Enhancement of the Institution

(Please limit to ten major ones and use telegraphic language)

(It is not necessary to indicate all the ten bullets)

- Employability quality of students needs to be enhanced
- Recruit competent and senior faculty with Ph.D. qualification
- Motivate faculty to publish papers in International journals of high repute
- Attract more research funding from external agencies and establish centres of research
- Inculcate research environment in the Institute by promoting more interdisciplinary research centres
- Forge MOU with reputed peer institution with in India and abroad
- Engage Alumni associations and all the stakeholders in a more tangible way
- Strive to achieve autonomous status to have better control over academic delivery
- Have better industry-academia interaction to make graduates industry ready and provide better industrial internships
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I have gone through the observations of the Peer Team as mentioned in this report

Signature of the Head of the Institution
Seal of the Institution

Signature of the Peer Team Members:

Sl.No	Name		Signature with date
1	Sandeep Sancheti	Chairperson	
2	Satish Chandra Sharma	Member Co-ordinator	
3	VINAYAK N. SHET	Member	
4	Dr. Shyam Singh Inda	NAAC Co-ordinator	

Place: Date