#### **BMS COLLEGE OF ENGINEERING**

### A REPORT ON THE IMPLEMENTATION OF STRATEGIC PLAN

PRESENTED TO

THE COUNCIL OF TRUSTEES, BMS EDUCATIONAL TRUST
THE BOARD OF GOVERNORS, BMS COLLEGE OF ENGINEERING

29.10.2014

**BMSCE** 

Report by Dr. K. Mallikharjuna Babu, PRINCIPAL

### BMS COLLEGE OF ENGINEERING BANGALORE STATUS REPORT ON THE IMPLEMENTATION OF STRATEGIC PLAN

Submitted on 25.10.2014

STG1
GET
PERMANENT
AFFILIATION
FOR ALL
ELIGIBLE
PROGRAMS

It is a pleasure to inform that the Government through its letter dated 10.10.2014 (referred to VTU) has noted its recommendations for grant of Permanent Affiliation status of all the 13 UG & 10 eligible PG Programmes for the period 2013-14 to 2017-18.

Submitted on 25.10.2014

## STG1 NBA ACCREDITATION

The Member-Secretary, NBA through his communication dated 08.10.2014 have approved the accreditation status of UG Programmes **BMSCE** Tier-I applied by under **Format** (Washington Accord). Out of 11 UG Programmes (accredited), five programmes have accredited for a period of 05 years and rest for the period of 02 years. (letter enclosed)

The accreditation has enabled global recognition and greater flexibility to our degrees and increases the mobility of BMSCE graduates in the signatory countries for higher study and jobs. The undergraduate degrees of BMSCE are now acceptable in the nations that have signed Washington accord.

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## STG2 GET ACADEMIC AUTONOMY FOR

**PG PROGRAMS** 

applications towards conferment The academic autonomy for PG Programmes for the period from 2014-15 to 2019-20 has already been submitted to VTU 13.05.2014. With the Government recommending PA status (Govt. letter dated 10.10.2014) for 80% of the total programmes (a pre-requisite for grant of academic autonomy), the Institution can expect the competent authority to grant conferment of Academic Autonomy to PG Programmes from the Academic year 2014-15 itself.

Submitted on 25.10.2014

STG3
STRENGTHEN
THE CAMPUS
FACILITY/
SUPPORT
SYSTEM

- Additional floor on Telecom Block (50% work completed)
- Additional Faculty rooms over 6<sup>th</sup> floor of MCA block (80% work completed)
- construction of a Research Lab to facilitate Research activities under Centre of Excellence (Advanced Materials)

#### Proposal:

Installation of lifts (MCA and Hostel blocks)

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STG3
STRENGTHEN
THE CAMPUS
FACILITY/
SUPPORT
SYSTEM

- A total of 10 LCDs worth 4.50 Lakhs have been procured.
- 12 CC TV cameras have been installed at various location inside the campus (Sept 2014)
- Installed Biometric at R&D labs (Sept 2014)
- Energy saving lamps in the indoor stadium (Sept 2014). It is proposed to have 12 more energy saving lamps at indoor stadium.

Submitted on 25.10.2014

STG4

IMPROVE TEACHING LEARNING PROCESS The academic initiative/vision to introduce Biology in the first year curriculum (2014-15) has been highlighted in many leading news dailies and appreciated by academic peers. Kumar, Professor, Biomedical Dr.S.Ananda Sciences, State University of New York has come forward to institute an endowment Rs.1,00,000/- the proceeds of which to be given as an annual award to a student who shows promise of pursuing biology inspired research in engineering. The Management has approved equal matching grant towards the said fund to support the cause.

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STG4

IMPROVE TEACHING LEARNING PROCESS Augmenting library resources

Subscribed for e-Journals & Books

Rs. 34,81,857.00

Purchasing of books

Titles: 443

Volumes: 1411

Amount: Rs. 10,72,114.00

Printed Journals worth Rs. 15,83,903.84

Submitted on 25.10.2014

#### STG5

ENHANCE THE OUTPUT IN RESEARCH AND CONSULTANCY

- A Consultancy Project worth Rs.25.00 Lakhs has obtained from ABB-GISL [EC ongoing]
- Consultancy projects worth Rs.15.00
   Lakhs has been obtained by CV
   Department [Period Jul Oct 2014]
- A project worth Rs.2.00 lakhs obtained from Eco Serve Solutions (EE) July 2014

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#### STG6

ENHANCE THE INDUSTRY – INSTITUTE COLLABORATIONS

Collaborative arrangements (MOUs) for the period since Jun 2014:

- YOKAGOWA (June 2014)
- AVENTIN (Aug 2014)
- TARUN Tech. (Oct 2014)
- SICAL (Aug 2014)

The dept. of AT invites 45-50 professionals from industry on regular basis.

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#### STG7

INTRODUCE NEW PG PROGRAMS

NEW PG (M.Tech.) PROGRAMS The institution has commenced the following two PG programmes from the academic year 2014-15 with an annual intake of 24.

M.Tech. in VLSI Design & Embedded Systems (EC)
M.Tech. in Manufacturing Science & Engg (ME)

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#### STG8

INTRODUCE MULTI-DISCIPLINARY COURSES/PROJECTS

Introduce Multidisciplinary Courses (Clusters approach)

- RS & GIS offered by CV aimed for students of all branches.
- Occupational Safety Health Hazards offered by CV aimed for students of all branches.
- Advanced Medical Image processing course for IT and ML students (offered by ML)
- Medical Physics (ML/IT/EC/EE/TE) offered by ML
- It is being contemplated to introduce more electives during the curriculum revision due for the higher semesters.

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#### STG9

BRING IN
INNOVATION
AND CREATIVITY

Foster Creativity and innovation in their respective disciplines

#### **BMSCE R&D Centre**

The following laboratories were established to facilitate research activities:

- Propel Lab 2 3D Printer (June 2014)
- Propel Lab 3 Aerospace (June 2014)
- Propel Lab 4 Automotive (Aug 2014)
- Propel Lab 5 Wipro Hardware integration (Sept 2014)

Wipro – MTLC, UTLP boards utilization for industrial applications

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# STG10 ESTABLISH e-GOVERNANCE CELL

#### e-Governance Cell is fully established

- Online registrations for Institutional Electives of 7<sup>th</sup> and 8<sup>th</sup> semester students are carried out successfully.
- Cluster Elective for Electrical Science Cluster students was offered through online.
- The e-Governance Portal is completely established.

Submitted on 25.10.2014

STG11
DEVELOP
NEW
CURRICULAM
FOR 2014-15

The Institution has already Introduced new curriculum for the First Year from the academic year 2014-15. Currently the curricula is being developed for Higher Semesters with focus on enhancing the following aspects of TLP:

- Value Added Courses/ Self-study component.
- Student workshops
- Projects based learning in few courses
- Group Discussions
- Seminars
- Web-based Learning (blended Learning)
- Technical Symposiums
- Internships
- Paper Publications

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#### LTG1

TO CREATE
CENTERS OF
EXCELLENCE IN
SELECTED
AREAS
PREFERABLY
ONE IN EACH
CLUSTER

Under TEQIP 1.2.1 the college has been granted a Center of Excellence in Advanced Materials Research with a grant of rupees five crores.

#### Proposal submitted

 Growth and characterization of semiconductor for LED application (estimated cost 85 Lakhs) – Submitted to AR & DB

#### Proposal under preparation

Synthesis characterization and application of nano assembled semi conductor for solar PV Cells (estimated cost 120 lakhs)

Applying for project to European Union

Submitted on 25.10.2014

#### LTG2

TO PROVIDE MODERN INFRASTRUCTURE FACILITY

### The Status of procuring equipments for various departments is as follows:

57% - of equipment purchased

17% - of order placed

26% - of procurement is in in process

#### **Centre of Excellence**

47% - order placed

52% - of procurement is in process

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#### LTG3

HAVE ALL THE FACULTY WITH PHD QUALIFICATION AT ALL LEVELS (70%)

#### **Obtained PhD**

Dr. Kiran Bailey (EC)

#### **Submitted Thesis Since July 2014**

S.Pradeepa (EE) - Final viva completed Suma (EC)

Vaseem A S (AT)

Ajay Chandra C K (AT)

A total of 07 faculty with PhD qualification have been recruited since June 2014

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## ENHANCE THE INTAKE OF UG PROGRAMS

For the academic year 2014-15, the following variation of Intake have been effected:

- Architecture (B.Arch.) from 80 to 120
- Mechanical Engineering (B.E.) from 120 to 180

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LTG5

OBTAIN

ACCREDITATION

FOR ALL THE

LABORATORIES

FROM THE

CONCERNED

AUTHORIZED

AGENCIES

Under process

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LTG6
FACILITATE
STUDENTS TO
BECOME
ENTREPRENEURS
[INCUBATION
CENTRE]

The following activities have been conducted by Entrepreneur Development Cell.

- Plea Market as part of phase shift
- Y2B talk (AIESEC) Sept 2014
- TATA first Dot workshop (Oct 2014)

#### **Proposals:**

To file application for funding with MSME, Government of India

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USE OF
TECHNOLOGIES
FOR PROVIDING
SKILL SETS &
ADDITIONAL SELFLEARNING, BRING
IN RESEARCH
CULTURE ACROSS
THE DEPARTMENTS

The BOS is currently in the process of reviewing the curriculum for the period from 2014-15 onwards with specific reference to Self Learning Components, enthuse/enhance research activities/culture etc.

Submitted on 25.10.2014

#### LTG8

COLLABORATE
WITH
INSTITUTIONS OF
HIGHER
LEARNING,
RESEARCH
ORGANIZATION
FOR EXCHANGE
OF RESOURCES

Three faculty of EC department have enrolled for course on Moocs at IIT Kanpur (Aug 2014)

Preliminary discussions are on to collaborate with the following Institutions / organizations towards research and capacity building:

Indian Institute of Technology, Chennai - QEEE Indian Institute of Technology, Mumbai – Robotics

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#### LTG9

COLLABORATE
WITH FOREIGN
UNIVERSITIES
FOR EXCHANGE
PROGRAMS

Preliminary discussions are on to collaborate with the following Institutions / organizations towards research and capacity building:

Purdue University, USA – EPICS University of Wisconsin, USA – Architecture University of Michigan, USA – Weather Station

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#### LTG11

ESTABLISH
COLLABORATIVE
LABORATORIES
WITH THE
SUPPORT OF
INDUSTRY TO
SERVE AS LIVE
CENTRES OF
LEARNING

MATH works campus vide licensing software (for all departments ) Sept 2014

Equipments procured towards establishing Intel Atom Processor Lab (TCE)

#### Proposals:

- YOKOGOWA to establish process control lab at Chemical department
- Key Sight Tech advanced communication lab at electrical department