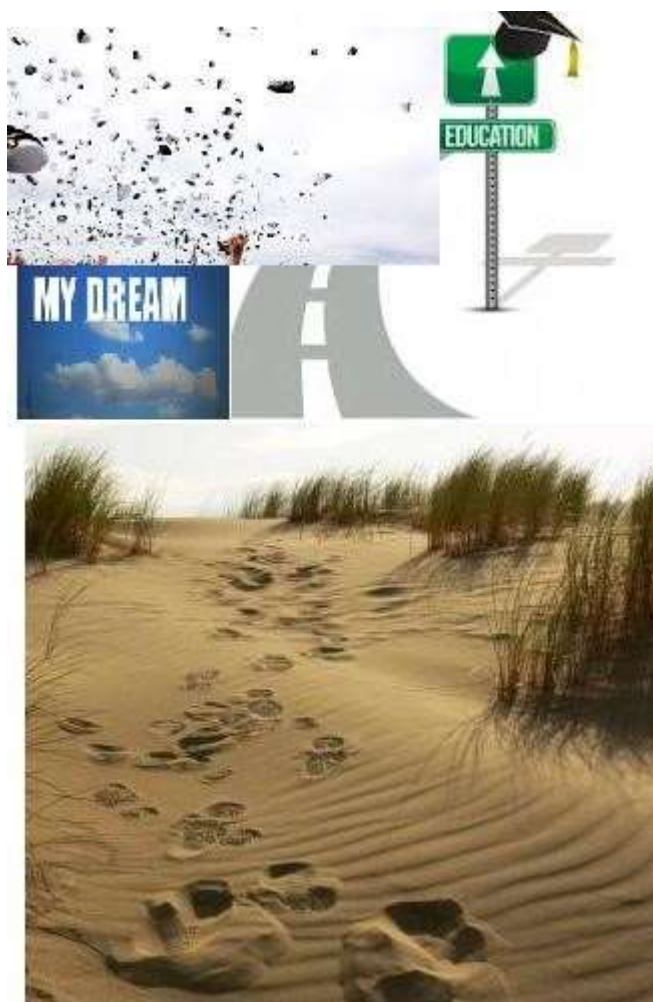


B.S.ABDUR RAHMAN UNIVERSITY OF SCIENCE AND TECHNOLOGY

(Deemed to be University u/s 3 of the UGC Act. 1956)



Strategic Plan -Vision 2020

To become

A

World Class University

CONTENTS

Sl. No.	Particulars	Page No.
01	VISION – 2020 - Preamble	3
02	Mission and Vision	5
03	Authorities of the University/Academic Bodes/Other Committees	6
04	Academic Leadership Positions	7
05	Action Plan	7
06	The proposed restructuring of Academics (Schools and Departments)	9
07	Need for Social Sciences & Humanities Subjects	10
08	Faculty requirements for Ancillary subjects	10
09	Need for developing Schools of Sciences	10
10	Programmes proposed in Sciences	11
11	Establishing a State-of-the-art Central Instrumentation and Analytical Facility (CIAF)	12
12	Policy of Faculty Recruitment	13
13	The targeted Student strength and Faculty by 2020	14
14	Thrust areas of research	15
15	VISION 2020 – Submitted by Schools and Departments	16
16	Targets and Time Frame (Infrastructure)	51
17	Faculty Statistics	53
18	The goals to achieve by 2020	60

19	What would we like to see at BSAU by 2020	61
20	Acknowledgement	62

VISION – 2020

PREAMBLE

The erstwhile B.S. Abdur Rahman Crescent Engineering College attained the status of a Deemed University from 2009 under Section (3) of UGC Act. This new status has not only brought in enormous academic freedom, but also a bigger responsibility of a degree awarding University. As a University, it works on a broader canvas of higher education perceptions as against a focused engineering education earlier. The expectations from a University are far more varied and competitive. A University is expected to provide opportunities of quality higher education in more than one discipline, covering both professional and general programmes. The concept of higher education as conceived in the several reports like the Radhakrishna Report, Kothari Report and the Yashpal Report emphasizes on over all development of human personality which can be attained by breaking the barriers of isolation between disciplines of learning. The present policy of the government and policy planners is focused on interdisciplinary teaching-learning and cutting-edge resource in thrust areas at the University level. A professional student of Engineering is expected to study additional courses in Social Sciences, Biology, Humanities and Management, and the vice versa. Thus a University remains incomplete, if it does not offer programmes, across disciplines of Engineering, Medical Sciences, Management, Physical, Chemical and Life Sciences, Social Sciences and Humanities.

The second pressure that builds on the University is the intensive competition amongst the hundreds of Universities currently functioning in the Country. The Challenge before us is to attain greater visibility across the Country and internationally, amongst students, parents, teachers, institutions, industry and research institutions both within and outside the Country. The students and parents as well as employers have been looking for institutions which have a well-defined structured educational system along with state-of-the-art infrastructural facility that

can ensure a sustainable high quality teaching and learning environment. A University should be a fertile place for innovation, creativity and experimentation, cross fertilization of thoughts and ideas, freedom to think and evolve. The visibility of an university depends on several factors; the major parameters being

1. State-of-the-art infrastructure
2. World class ambience and work culture
3. Highly motivated, dedicated and well qualified teaching community who have an international exposure.
4. Excellent teaching laboratories and Research laboratories which facilitate high quality teaching as well as cutting-edge research
5. Excellent library with easy web portal access to E-resources
6. Heterogeneity and Demographic diversity of students and faculty members is the key to quality, cross breeding of ideas and a creative teaching learning environment, thus enriching the national and international character of the University.
7. Flexibility and opportunity for interdisciplinary learning
8. High quality research output from the faculty members and scholars
9. Assessment and Accountability of teachers
10. International Collaborations for research and students and faculty exchange
11. Excellent student amenities including sports, clubs, professional societies, indoor games, etc.

Keeping in mind some of the demands of being a University and obligations of a University, we at B.S. Abdur Rahman University have started our proactive reforms through restructuring our Academic programmes based on the present day needs and in accordance to NAAC, NBA, ABET and establishment of new schools. We have also defined certain action plan for the next 7 years with a clear vision of emerging as one of the top ten universities of the country both in Teaching and Research by 2020.

- **To blossom into an internationally renowned University**
- **To empower the youth through quality education and to provide professional Leadership**
- **To achieve excellence in all its endeavors to face global challenges**
- **To provide excellent teaching and research ambience**
- **To network with global Institutions of Excellence, Business, Industry and Research Organizations**
- **To contribute to the knowledge base through Scientific enquiry, Applied Research and Innovation**

MISSION

VISION

B.S. Abdur Rahman Institute of Science & Technology aspires to be a leader in Education, Training and Research in Engineering, Science, Technology and Management and to play a vital role in the SocioEconomic progress of the Country.

Ultimately to rank amongst top 10 Indian Universities by 2020

AUTHORITIES OF THE UNIVERSITY :

- **Chairman – Board of Management**
- **Vice chancellor**
- **Pro-Vice Chancellors – 1 & 2**
- **Registrar**
- **Controller of Examination**
- **Finance Officer**

ACADEMIC BODIES

- **Academic council**
- **Academic Advisory Committee**
- **Planning & Monitoring Board**
- **Standing Committee**
- **Board of Studies**
- **Board of Research**
- **Research Advisory Committee**
- **Advisory Committee for Faculty Training Academy**

OTHER COMMITTEES

- **Discipline and Welfare Committee**
- **Grievance Redressal Cell**
- **Committee on “Earn While you Learn Scheme”**
- **Women Empowerment Cell**

- **Committee for Parent-Teacher Interaction**
- **Committee for getting Feedback from Stake Holders**
- **Library Advisory Committee**
- **Internal Quality Assurance Cell**
- **Fee Fixation Committee**
- **Committee on Ragging Prevention**
- **Advisory for Energy Studies and Research**

ACADEMIC LEADERSHIP POSITIONS

- **Vice Chancellor**
- **Pro-Vice Chancellor – Academics**
- **Pro-Vice Chancellor – Administration**
- **Dean (Academic)**
- **Dean (Student Affairs)**
- **Dean (Academic Research)**
- **Director (Admissions and Planning & Development)**
- **Director (International Collaborations)**
- **Director (Sponsored Research & Consultancy)**
- **Director (Faculty Training Academy)**
- **Director (Centre for Energy Research and Studies)**
- **Advisor (Faculty Training Academy)**
- **Advisor (Academic Research)**
- **Controller of Examinations**
- **Deputy Finance Officer**
- **Assistant Registrar (Alumni Relations)**

ACTION PLAN:

It shall be an University of Science and Technology in true sense with emphasis on research in addition to teaching, consultancy and extension activities.

- 1. It shall develop cross disciplinary learning opportunities and promote interdisciplinary research intensive, teaching and research programmes.**

- 2. It shall establish Schools of life sciences, Physical and Chemical Sciences in addition to the existing Schools of Engineering, Management and Architecture. The School of Social Sciences and Humanities shall cater to all the other Schools of Engineering and Sciences.**
- 3. It shall work for bringing in demographic diversity both in students and Teachers of this University. The recruitment of students and Faculty hereafter shall be from across the Country and also from overseas. Faculty from western world should be hired on contract for all departments.**
- 4. Shall constantly improve and update the curriculum and syllabi on the principle of “Outcome based” curriculum envisaged by NBA and ABET**
- 5. It shall get all programmes as well as University accredited by NBA, ABET and NAAC.**
- 6. It shall invite international faculty for short and long term stay in the University to teach and to undertake joint research with faculty members of our University.**
- 7. It shall establish a state of the art library with emphasis on E-resources and facility for remote access.**
- 8. It shall establish exclusive research laboratory with sophisticated analytical instruments for high precision characterization of materials.**
- 9. It shall set a target of attaining 100% faculty holding Doctorate degree by 2020.**
- 10. It shall set a goal to establish atleast two to three Centres of excellence in chosen areas of Engineering and Sciences.**
- 11. It shall encourage and motivate teachers to write research projects and supervise scholars for Doctoral degrees.**
- 12. It shall gradually introduce integrated programmes both in engineering and in science subjects.**

13. It shall attract international students from other countries for short and long term programmes.
14. It shall establish collaborations with leading Overseas Universities/ Research Laboratories for exchange of students and faculty and shall also offer twinning and double degree programmes.
15. It shall establish off shore campuses in select cities of Middle East and Far East countries like Malaysia and Indonesia.
16. It shall establish a publication division and this faculty shall be encouraged to publish Text books, Monographs and reference books, reviews for which appropriate compensation by way of royalty shall be paid.
17. It shall create counseling as well as Grievance Cells to address the problems of our students and redressal to the problems of faculty and other staff members.
18. It shall introduce the academic and administrative performance of the University by setting quality benchmarks.

The proposed Restructuring of Academics

Schools and Departments

SCHOOLS	DEPARTMENTS
1. School of Mechanical Sciences	1. Aerospace Engineering 2. Automobile Engineering 3. Mechanical Engineering 4. Polymer Engineering
2. School of Infrastructure	5. Civil Engineering
3. School of Architecture	6. Architecture
4. Crescent Business School	7. Management Studies
5. School of Electrical and Communication Sciences	8. Electrical and Electronics Engineering 9. Electronics and Communication Engineering 10. Electronics and Instrumentation Engineering

6. School of Computer, Information and Mathematical Sciences	11. Computer Science & Engineering 12. Information Technology 13. Computer Applications 14. Mathematics
7. School of Physical and Chemical Sciences	15. Physics 16. Chemistry 17. Material Science
8. School of Islamic Studies	18. Islamic Studies
9. School of Social Sciences and Humanities	19. English 20. French 21. Economics 22. Sociology 23. Psychology 24. Law
10. School of Life Sciences	25. Bio Technology 26. Molecular Biology & Bio Chemistry 27. Micro Biology 28. Genetics & Genomics

NEED FOR SOCIAL SCIENCES AND HUMANITIES SUBJECTS:

The new guidelines of curriculum for technology programmes require teaching of non-engineering courses in social sciences, Humanities and Management. The University as such remains incomplete without social sciences and Humanities subjects being taught and research being conducted. Hence separate schools have been created for social sciences and Humanities.

FACULTY REQUIREMENTS FOR ANCILLARY SUBJECTS:

There shall be atleast four Assistant Professors in each of the subjects offered to Engineering students. If Master's and Ph.D. programmes are offered there shall be additionally one Professor and two Associate Professors for each subject.

NEED FOR DEVELOPING SCHOOLS OF SCIENCES:

The recognition and visibility of an university as mentioned earlier depends largely on the ranking of the University at National and International levels. The ranking is governed by a number of parameters such as the popularity perception amongst students of the University, the inter disciplinary teaching and research programmes, faculty and students from other parts of the Country/abroad on the Campus, the cutting edge research carried out by the faculty and students, the peer reviewed publications in high Impact Factor (IF) journals, Citation Index and HIndex of an University. It has been now established and proved beyond doubt that all the high ranking institutions/universities world over have several departments offering Master's and Ph.D. Programmes and investing heavily in interdisciplinary research in Life Sciences, Material Sciences, Pharmaceutical, electronics, Chemical Sciences, Drug Delivery etc.,

The B.S. Abdur Rahman University has therefore decided to establish two schools namely Crescent School of Life Sciences, School of Physical and Chemical Sciences. It proposes to develop state of the art facilities in Life Sciences and offer programmes in Genetics, Molecular Biology and Biochemistry, Microbiology, Biotechnology, Chemical Biology and Food Sciences under the School of Life Sciences.

Under Physical and Chemical Sciences, it proposes to offer Masters' programmes in Electronics, Material Science, Nano Science and Technology besides Physics and Chemistry.

PROGRAMMES PROPOSED IN SCIENCES:

The University shall offer programmes keeping in view Short Term and Long Term goals. There shall be three levels of the programmes offered with

1. M.Sc.
2. Ph.D.
3. Short Term Trainings / Summer and Winter School

It is also proposed to introduce integrated M.Sc./Ph.D. Programmes in certain selected subjects particularly in Life Sciences.

Short Term Training Programmes offered by School of Life Sciences will not only bring in enormous visibility to the School amongst Scholars, institutions, industry and professionals, but will also generate substantial funds for maintenance of laboratories. Some of the short term programmes proposed by the short listed faculty for recruitments in their vision paper are mentioned below:

- **Techniques in Advance Genomics**
- **Monoclonal Antibodies**
- **Techniques in Antimicrobial Compound Screening**
- **Techniques in Molecular Biology**
- **Cloning**
- **Cell Culture and Applications**
- **Techniques in Virology**
- **Techniques in Immunology**
- **Tumour Biology**
- **Drug Target Identification**
- **Computational Genomics**
- **Microbial Genomics**
- **Meta-genomics** □ **Plant Genomics, etc.**
- **More once the faculty join**

These are only suggestive, and may change with available expertise.

These intensive programmes shall be offered as Winter/Summer Schools ranging between 3 and 4 weeks and open to Ph.D. Scholars, Scientists from Industries, University and College teachers across the country. Such programmes will be offered by our new faculty jointly with Scientists from overseas Universities (wherever possible) and National Laboratories.

Similar Short Term Programmes shall also be introduced in Engineering Disciplines.

ESTABLISHING A “STATE-OF-THE-ART” CENTRAL INSTRUMENTATION AND ANALYTICAL FACILITY (CIAF)

Research in Science and Technology requires not only good working laboratories but also excellent facility for measurements and characterization of materials. Research findings will become publishable in Journals of high impact factor only if the data is

supported with the authentic measurements and characterizations. A central instrumentation and Analytical facility is a necessity in a research oriented university. It is proposed to establish such a laboratory with major instruments which are to be used by all faculty and scholars from across all disciplines. Once the credibility and research potential of the University is established, many of the instruments will also come through large sized funded projects. The development of CIAF can be phased out over a period of next 7 years investing on the basic and immediate requirements to boost research. CIAF can offer charged services to outside institutions, researchers and industries thus earning substantial revenue for the maintenance of instrument lab and purchase of consumables.

Phase I (upto 2015)

- **UV-Visible-Spectrophotometer**
- **F.T. IR spectrometer**
- **Spectrofluorometer**
- **FT-NMR-400mH₃**
- **Scanning Electron Microscope (SEM)**
- **Atomic Force Microscope (AFM)**
- **X-ray Diffractometer (powder)**
- **Table top IR Spectrometer**
- **High Performance Liquid Chromatograph (HPLC)**
- **Gas Chromatograph (GC)**
- **Thermal Analyzer - TGC, DSC, TMA**

Phase II (2020)

- **Electron probe micro analyzer**
- **Transmission Electron microscope**
- **XRF**
- **GCMS**
- **LC – MS**
- **Laser Raman Spectrometer**
- **Single Crystal x RD**

These are suggestive and could be changed with requirement.

POLICY OF FACULTY RECRUITMENT

It should be the policy of this university to recruit faculty possessing a good Academic record and Professor should be given to those with following parameters:

- 1. Who possess a Ph.D. degree**
- 2. Who had their Masters and Ph.D from institution of high repute**
- 3. Those who have an international exposure and those who have worked as Post Docs in overseas laboratories and institutions.**
- 4. Those who have proven evidence as good researchers with good publications in peer reviewed referred journals of high impact factor.**
- 5. Those who have a promise of international collaboration with their former / current contacts**
- 6. Those who have a promise of writing research projects and mobilizing research funds and enriching the laboratory.**
- 7. Those who can promise research culture by supervising Ph.D students**
- 8. Finally those who have an aptitude to be a creative and innovative teacher**
- 9. The selection shall not be by just one personal interview, but by a continuous assessment through “one to one” correspondence seeking a detail write up on the Vision, Research plan, commitment of teaching certain subjects, knowledge and expertise in techniques, etc. (This procedure and norms are being followed for recruiting Life Sciences faculty).**

THE TARGETED STUDENT STRENGTH BY 2020

Programmes	Current Intake	Targeted Intake	Total on Roll (2012-13)	Total strength by 2020
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B.Tech.	1020	1500	3390	6000
M.Tech.	360	1000	490	2000
Ph.D.	80	200	254	600
MBA	120	120	231	240
MCA	120	120	314	240
B.Arch.	80	120	166	600
M.Arch.	--	40	--	80
M.Sc. Actuarial Science & Chemistry	60 (2 x 30)	200	74	400
Arts & Humanities (B.A. Islamic Studies)	55 (40 Arabic + 15 English)	60	119	120
Total	1895	3360	5038	10280

Faculty:

Current : 345 Expected : 600

THRUST AREAS OF RESEARCH:

1. Engineering:

Compliance Report and Perspective Plan prepared by Prof. Sankaranarayanan and his team gives as good compilation of the Study and projection as on 2011. Since This report is based on data older than

2011, we have prepared the future plan of Schools and Departments based on one or two page Vision papers submitted by the faculty of respective departments and Deans, which has been compiled as a Vision Paper.

2. Sciences – Life (Tentative)

- **Molecular Biology**
- **Biochemistry**
- **Chemical biology**
- **Biotechnology**
- **Genetics**
- **Microbiology**
- **Drug discovery and delivery**
- **Stem cell**
- **Biophysics**

3. Material Science: (Tentative)

- **Nano Materials**
- **Nano Energy materials**
- **Solar Cells**
- **Materials for Electronics, Opto Electronics Devices**
- **Semi Conducting Materials, Bio Materials**

These are suggestive and could be changed with requirement.

VISION 2020

SUBMITTED BY SCHOOLS AND DEPARTMENTS

SCHOOL OF MECHANICAL SCIENCES

DEPT OF AEROSPACE ENGINEERING BY 2020

Thrust Area of Research

Introduction:

Dept. of Aerospace Engineering is only three years old; started offering B. Tech Aeronautical Engineering Programme in 2010. The first batch of students is entering the final year of the B. Tech Programme and shall pass out in May 2014.

We have already established six state of the art laboratories covering the major areas of Aeronautical Engineering including Aerodynamics, Aircraft Structures, Propulsion, Aircraft Systems, Aero Engine Maintenance and Aircraft Structural repair. CFD & Structural Simulation Lab and Avionics Lab are under development. Development of a CFD Research Laboratory is on the anvil.

The single thrust area of research for the Dept. of Aerospace Engineering for the next 7 years is to develop expertise in obtaining Computational Solutions to fluid flow and aircraft structural problems experienced in flight vehicles.

Need:

Major Aircraft manufacturers are currently using the commercially available software packages for obtaining computational solutions for their design and analysis activities. These activities are outsourced to many Indian Industries involved in offering engineering services. Indian Software giants have also entered in this area, resulting in a large demand for Aeronautical engineers with software knowledge and training. Therefore, it is necessary that we build expertise in this area of interest to Industries and train our undergraduate students to take up these activities confidently.

Plan of Action:

- 1. B. Tech curriculum is designed to train our students to use the commercial software packages employed in aircraft Industries.*

- 2. Will start offering M. Tech programme in Computational Mechanics from 2014-15.*
- 3. We are also in the process of developing suitable computational laboratory infrastructure in this area, including research laboratories in CFD and Structural Analysis.*
- 4. Will be deploying a team of faculty members to take up research activities related to CFD and Structural Simulations as a preparation for taking up industry sponsored research work in this area in the next two years.*
- 5. Enter into collaborative activities with Indian industries within the next five years and jointly solve problems of interest to industries.*
- 6. Will be deploying a team to develop computational solutions for the problems related to Unmanned Aerial Vehicle (UAV), a problem of global interest. The team will be looking for suitable industry collaborations by 2015.*
- 7. Introduce a related practical course/ experiments in B. Tech programme.*
- 8. Will be deploying a team of faculty members to work on Bio-fluid Mechanics and Bio-materials, the problems of interest to life science and health care industry.*
- 9. Will be looking for collaborating with reputed universities in India or abroad by 2016.*

Chennai is a hub for major automobile and auxiliary industries. The department of Automobile Engineering aims to collaborate with those industries and produce engineers for the societal need.

The vision 2020 is given under the following category

- 1. Academic*
- 2. Research*
- 3. Consultancy and extension*

Academic:

- *Provide quality education and training to the students so as to make them globally competitive.*
- *The department has a vision to develop world class laboratories for the following testing purposes.*
 - *3D Wheel balance and wheel alignment*
 - *Pollution testing centre*
 - *Fuel testing and characterization lab*
 - *Real time testing centre for both two wheelers and four wheelers using vehicle dynamometer*
- *The department has a vision to start post graduate degree in automobile engineering*

Research:

- *Well-equipped research centers to be established in the following areas*
 - *Alternative fuels for IC engines*
 - *Engine design modification*
 - *Flow visualization using advanced optical techniques*
 - *Homogeneous charged compression ignition (HCCI), Gasoline direct injection (GDI) and other recent I.C engine developments*
 - *Mathematical modeling of air flow, fuel sprays, combustion, emission formation and transport processes in I.C engines*

Consultancy and extension:

- *Close rapport with nearby automobile and auxiliary industries for solving their technical challenges*
- *Providing hands on training in the field of automobile engineering for the employees of the nearby automobile and auto ancillary industries.*
- *Providing regular training to the public and school students regarding safety systems available in the vehicle and usage of various tools.*

DEPARTMENT OF MECHANICAL ENGINEERING

IMPROVING THE LIVES THROUGH LEARNING

Mechanical Engineering Department strives to be recognized globally for outstanding education and research leading to well-qualified engineers, who are innovative, entrepreneurial and successful in advanced fields of engineering and research.

Play a leading role in transforming the lives of our students, through the use of partnerships, innovation, outreach and technology.

TEACHING LEARNING PROCESS

Imparting quality education to the students and enhancing their skills to make them globally competitive mechanical engineers.

- *Achieve through activity based learning and project based learning.*

To be a leader in producing innovative graduates and research that focus on meeting the present and future needs of society.

- *A model developed in association with Society of Automotive Engineers SAE - aSOP (Automotive Student Orientation Program) TO MAKE THE STUDENTS INDUSTRY READY (hands-on experience).*

ESTABLISHING NEW DIVISIONS

Thereby offering UG, PG and PhD programmes

- *Material Science Engineering*
- *Mechatronics*
- *Metallurgy*
- *Industrial Engineering*
- *Energy Engineering*
- *Welding Engineering*

ESTABLISHING VARIOUS CENTRES OF EXCELLENCE

- *Center for Materials Innovation*
- *Centre of Excellence for Design in Light Metals*
- *Center for Design Technology*
- *Center for Advanced Manufacturing*
- *Center for Mechatronics and Robotics*
- *Center for Quality Management*
- *Biomechanics and Bioengineering Centre*
- *Center for Interdisciplinary research*

INTEGRATING THE INDUSTRIES AND THE STUDENTS

- *Internships for the students as well as faculty members in order to have an exposure of the manufacturing processes and trends in the industries.*
- *Adjunct Professor Scheme: Link with industry experts for lectures on current trends in the technical areas.*

JOINT PROGRAM WITH OVERSEAS UNIVERSITIES

- *Developing linkages with world class educational institutions in India and abroad for excellence in teaching and research.*
- *Inviting faculties from abroad for short term courses/ lectures which can be offered as core subjects or as elective to the students.*
- *Sharing of expertise /knowledge between the Universities abroad through faculty exchange program through DAAD, Fulbright fellowships etc. This cultural exchange*



will help our university to enhance in global competition and prepare our students to meet the global challenges.

RESEARCH AND CONSULTANCY

Promote innovation and excellence in research

Maintaining state -of-the-art research facilities in the University to provide the students and faculty with opportunities to create, interpret, apply and disseminate knowledge.

Developing a world -class portfolio of research projects and related activity at national and / or international levels through collaborations and joint research involving other universities, industries or government.

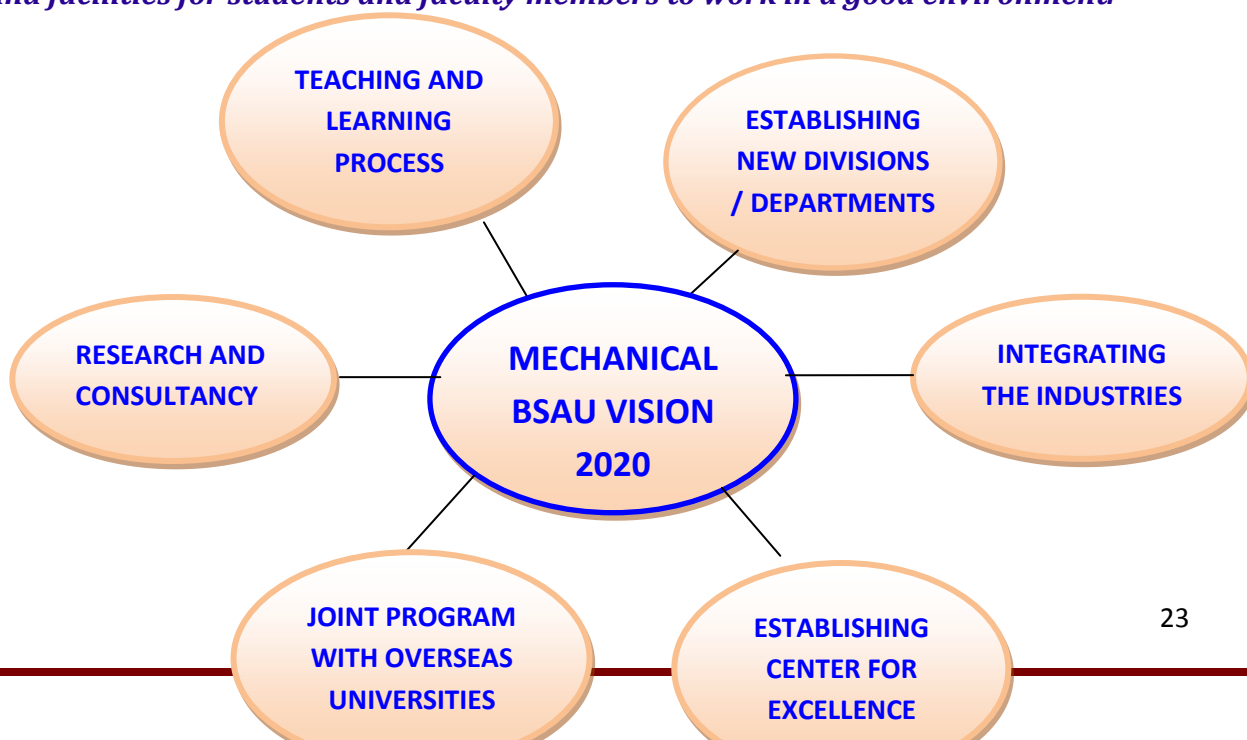
Encourage and motivate faculty members to publish papers in high impact journals.

Currently we are organizing short term courses and part time B Tech programmes for Ford, Apollo and other organizations. We will try to explore the possibilities of research and consultancy in the core areas of research on par with International Universities.

BUDGETING

To fulfill the vision of the department the revenue will be generated through student recruitment, research funding from government organization and industries.

Proportionate funding to be allotted from the university to create the infrastructure and facilities for students and faculty members to work in a good environment.



□

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DEPARTMENT OF POLYMER ENGINEERING

The Department of Polymer Engineering is committed to develop engineers and scientists with sound technical knowledge, skill and creativity to meet the current requirement of industry as well as the changing society. To achieve excellence in teaching, research and extension activities, the department proposes the following strategic plans; Teaching:

The department needs to increase undergraduate and post graduate enrolments in order to support its planned development of new programs, support growth in research activity and meet the growing demand.

To meet the future requirements for the new technological development and industrial growth, following new programmes are proposed;

- 1. M.Tech. in Composite Technology*
- 2. PG Diploma in Plastics Process Engineering (2 semesters)*
- 3. PG Diploma in Polymer Testing Technology (2 semesters) Research:*

The department has received several funded projects and is actively involving in advanced fields of research such polymer nano-composites, hybrid composites, nanocomposite coatings and poly-electrolytes. In order to strengthen the research potential of the department and also to attract funded projects, consultancy projects, research scholars, creation of following centre of excellence are proposed:

- 1. Centre for Advanced Composite Technology*
- 2. Centre for Bio and Biomedical Polymers*

The department is already involving in interdisciplinary research work with Mechanical, Civil, Electrical and Electronics Engineering departments and the establishment of the above centres will enhance such activities.

For the accomplishment of research in developing new materials for advanced applications like fuel cells, energy production, conversion and storage, following strategies are planned:

- 1. Establishing contact with foreign universities for collaborative research work.*
- 2. Research collaborations with leading industries and research organizations.*

SCHOOL OF INFRASTRUCTURE

DEPARTMENT OF CIVIL ENGINEERING

CREATING A SUSTAINABLE WORLD

Civil Engineers have a demanding role in taking care of the diverse societal issues along with the health of the environment due to:

- *Exponential rise in population*
- *Increase in rural to urban shift of people*
- *Shrinking of natural resources*
- *Infrastructural developments*
- *Increase in natural and manmade disasters*
- *Degradation of environment*

Considering the above facts

VISION 2020 IDENTIFIES THE FOLLOWING:

- **STUDENT ENROLMENT FOR EXISTING PROGRAMME**
(Also increase the diversity and excellence of our students, faculty, and staff)

The number of student enrolment is to be gradually increased

<i>B.Tech (Civil Engg.) Full time</i>	<i>: Four sections with 240 students</i>
<i>M.Tech (Stru) Full Time</i>	<i>: 50</i>
<i>M.Tech (CE & PM) Full time</i>	<i>: 50</i>
<i>M.Tech (CE & PM) Part time</i>	<i>: 30</i>

- **NEW PROGRAMMES**

<i>B.Tech : STRUCTURAL ENGG./ INFRASTRUCTURE ENGG.</i>	<i>: 60</i>
<i>B.Tech : CIVIL ENGG(Part time-evening)</i>	<i>: 60</i>
<i>B.Tech (Civil Engg.)- On shift basis</i>	<i>: 60</i>
<i>M.Tech : WATER AND ENVIRONMENTAL ENGG.</i>	<i>: 50</i>
<i>M.Tech : GEOINFORMATICS</i>	<i>: 50</i>

- **NEW DIVISIONS, CENTRES AND RESEARCH LABS**

1. *Structural Engineering division*
2. *Construction materials and Technology Laboratory for Research purpose*
3. *Centre for sustainable water and environment*

➤ **THRUST AREAS FOR DEVELOPMENT**

1. *Cost effective and energy efficient building materials*
2. *Structural Engg. – Rehabilitation of structural elements, Steel concrete composites*
3. *Sustainable Infrastructure and environment*

ACTION PLAN

YEAR	Activity
2013-14	<ul style="list-style-type: none"> • <i>B.Tech(CIVIL ENGG.) : On shift basis (2 p.m – 8 p.m) – for optimum utilisation of space</i> • <i>Establishment of construction materials and Technology Lab for research purpose</i>
2014-15	□ <i>M.Tech : Water and Environmental Engineering</i>
2015-16	□ <i>B.Tech (CIVIL ENGG.): Part time - evening (for diploma holders)</i>
2016-17	□ <i>B.Tech – Structural Engg./Infrastructure Engg.</i>
2017-18	<ul style="list-style-type: none"> • <i>Establish Centre for sustainable water and Environment</i> • <i>Organise - International conference</i>
2018-19	□ <i>M.Tech – Geoinformatics</i>
2019-2020	<ul style="list-style-type: none"> • <i>All Faculty will be Ph.D holders or pursuing Ph.D</i> • <i>Make BSAU a fully green campus</i>
	PARALLEL ACTIVITIES
2013- 2020	Research on : <ul style="list-style-type: none"> • <i>cost effective and energy efficient materials</i> • <i>Waste water purification applying nanotechnology</i> • <i>Water conservation</i> • <i>Watershed management</i> • <i>Green technologies</i> • <i>Rehabilitation of structural elements</i> • <i>Steel Concrete composites</i> <p>➤ <i>Obtain more grant from funding agencies</i></p>
	<ul style="list-style-type: none"> ➤ <i>Increase the number of journal publications</i> ➤ <i>Conduct training programmes, workshops etc. on emerging areas</i> ➤ <i>Establish industry tie ups and international collaboration</i> <p><i>Establish consultancy based on applications of GIS in Civil Engg.</i></p>

□ **MOTTO**

To make School of infrastructure, BSAU as the single destination point for doing U.G., P.G., Ph.D in Civil Engineering related field

CRESCENT SCHOOL OF ARCHITECTURE

The Crescent School of Architecture established in the year 2009 as one of the constituent Schools of the B.S. Abdur Rahman University, Vandalur, Chennai - 48. Contemplates on a Philosophy as an off-shoot of the vision and mission of the university. Accordingly the Five year B. Arch Degree programme incorporates a curriculum focusing on the individual and society interface, consideration for energy, environment and sustainability, evolving a professional who could substantially contribute to the built environment. In the context of historicity with multicultural pluralism, India has to develop its own technology ahead of advancements leading to a sustainable environment. The role of an architect is imminent.

The school started with an intake of 40 expanded to 80 and proposes to increase it to 120 in the future. Since, sustainability of the built environment is the focus, diversification into specialization in interior architecture, broader understanding of urban environment and planning and management issues are to be given a thrust. Master's programmes in Interior Architecture, Architectural Management and planning will be introduced. The school proposes to build necessary infra-structure in the form of an independent building to accommodate above programmes and initiative has been taken.

Developing the school into a centre of excellence in architectural education and into Research and Resource centre will be taken up simultaneously. Efforts are underway to organize National and International seminars with focus on historicity, energy, and sustainability. The school proposes to have Training programmes jointly with NIASA (National Institute of Advanced Architectural Studies) Pune. Ambitious plans are programmed to have International Masters' Degree in Architecture on the lines of other schools of India.

CRESCENT BUSINESS SCHOOL

DEPARTMENT OF MANAGEMENT STUDIES

VISION

To develop catalysts to meet global challenges of business transformation.

MISSION

To become an internationally reputed B-school by

- *Producing competent and socially responsible management professionals to meet local and global business requirements.*
- *Conducting innovative research and to disseminate knowledge output to end users.*
- *Endeavoring excellence in academia industry interface*

SCHOOL OF ELECTRICAL AND COMMUNICATION SCIENCES

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

This vision document envisions a future beyond its seven years and builds on a platform of excellence, which was made stronger than ever in our most recent past by investing in a wellspring of talented faculty and new facilities. Department of EEE is uniquely positioned to drive research agendas which respond to the challenges and opportunities of the 21st century, and shape engineers who will impact the global engineering profession and society. Our plan will lead the way as we transform engineering education and research to meet the needs of an innovation-economy of the 21st century.

- The 2020 plan aims that Department of EEE be the first choice for students who wish to excel in the academics as well as in professional life and that our students learn to be competent, mature, and critical thinkers.*
- The self-learning and industrial internship process already existing in the department curriculum, will be augmented by an exposure to industry via attachments, industrially supervised and sponsored projects, guest lectures, seminars, and active and vibrant professional society activities. Credits obtained by the student in co-curricular achievements will also form a part of his total credit towards his degree.*
- All the faculty members of the department will be PhD holders and also, every year each faculty member would be publishing their research findings in at least one refereed journal with Scopus index. Likewise, the number of faculty who are IEEE, IE(I) fellows, or have won other prestigious awards would also be inducted into our team.*
- With all faculty members being Doctoral degree holders, the size of Research Scholar pool in the department also will be expanded, which will in turn enhance the research output of the department.*
- The greatest strides in engineering, is happening at the boundaries, where disciplines meet. Hence, our thrust area of research will be in the field of "Bioelectrics" which is an application of electrical engineering concepts to life sciences. This calls for an advanced understanding of how biological systems operate and develop effective biology-based technologies for applications across a wide spectrum of societal needs.*

- *A new M.Tech Programme in “Bio-electrics” is also proposed to be introduced. This emerging discipline of biological engineering lies at the interfaces of biological sciences, engineering sciences, mathematics and computational sciences & aims to enhance the quality and diversity of life.*
- *Many equally significant research projects are underway in the areas of Deregulation and Restructuring of Power Systems, Outdoor Polymeric Insulators, Analysis of Switched Reluctance Motors, Wind Farms etc.*
- *With a concerted effort to implement a more visionary approach to meet the growing energy needs of a nation, an M.Tech programme in “Power Engineering” will be introduced, with elective streams in Power Electronics & Drives, Power System, Smart Grid, Micro Grid, Control System and High Voltage Engineering.*
- *Our location in the Industrial area of Chennai is our greatest asset. In order to become one of the top schools of electrical engineering in the region, we will broaden our already strong ties with industry. Hence, it is proposed to offer certificate/diploma courses in Energy Conservation & Auditing, Industrial Drives & Control, Elevator Engineering, Power Project Engineering, etc for the people from Industry.*
- *Improve the quantum of funds obtained through sponsored projects, consultancy, training programs etc.*
- *The department will attract engineering students from top universities in US, Australia and elsewhere to do part of their studies here and hence 20% of the students of the department will be those belonging to the “Students Exchange Programme”.*
- *Learning opportunities will be enhanced by developing additional remote instruction and learning capabilities to complement our existing curricula.*
- *Encouragement and momentum will come from the external partners – the “citizens” of the department scattered all over the world - our torchbearers – our alumni. It will also come from the industries which have tested, approved and assimilated our students.*

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Department of Electronics & Communication Engineering will contribute to the ever changing industrial requirements, economic growth and global societal needs by establishing an environment which encourages the understanding and curiosity to inspire the creativity in technical skills and entrepreneurship abilities.

To establish this vision, the department will:

- Impart Engineering research and education, with an emphasis on integrated and discovery learning and on engineering for global society.*
- Encourage students to learn through team based projects, to undertake research, internships, entrepreneurship and provide international experiences by collaboration with foreign universities for innovative product development.*
- Provide all support to faculty teams to undertake research projects from funding agencies and to obtain patents rights of the research outcome.*
- Promote interdisciplinary research in the emerging areas of Electronics and communication, Automobile, Aerospace, Instrumentation and Polymer Engineering.*
- Offer professional development programs for faculty members like post-doctoral and exchange programs.*
- Conduct workshops, conferences (national & international) and guest lectures on current issues with national and international universities like Purdue, NUS, NTU(Singapore), UTM(Malaysia) and research institutes like ISRO,DRDO,NRB,IGCAR,CSIR etc.*
- Bring out in-house publications to highlight the ongoing research activities and contribution made by the department for further growth of the discipline.*
- Establish centre of excellence in thrust areas of the department namely VLSI Design, Wireless Sensor Network and Image processing.*
- Fund innovative society based student projects for commercialization.*
- Provide consultancy services to the related industries.*
- Support industry in their research and professional development needs.*
- Offer inter – disciplinary B.Tech programs on Nano Electronics, Bio Medical Electronics and Automotive Electronics to expand the research and employment opportunities.*
- Increase the student enrollment in the department through quality education and high end infrastructure.*

Develop new laboratories on cutting edge technologies like RF and wireless communication and further to develop Integrated circuits lab with fabrication facility.

DEPARTMENT OF ELECTRONIC AND INSTRUMENTATION ENGINEERING

The primary focus of Electronics and Instrumentation Engineering department is vast and appears to be growing due to increased use of automatic control in manufacturing and process plants.

THE PROGRAMME THAT COULD BE STARTED IN THE NEAR FUTURE INCLUDES

1. P.G. Diploma in Power Plant Instrumentation (2014-15)

It has high demand in power plant due to the phase of transition of technology upgradation in the area of generation and transmission of power.

2. P.G. Diploma in Process Automation (2015-16)

High quality standards and growing concerns of safety and environmental damage have pushed the Industrial sector to adapt state of art Automation Techniques for effective utilization of resources and optimized performance of process plants. Qualified automation engineers with knowledge such as PC / PLC based control, Instrumentation, Industrial Drives, DCS, SCADA / HMI, RTOs etc. are needed to meet these requirements of designing appropriate automation systems.

NEW PROGRAMMES WITH CHANGING SCENARIO

1. B.Tech – Biomedical Engineering (2014-15)

(Twinning programs can be carried out with universities abroad)

2. M.Tech – Biomedical Instrumentation (2015-16)

3. M.Tech in Micro Electro Mechanical Systems (MEMS) (2017-18)

(MEMS is the integration of Mechanical elements, sensors, actuators and electronics on a common silicon substrate through micro fabrication technology). It offers significant potential for technological advances in medical diagnostics, autonomous robotic systems, communication and computer systems.

4. M.Tech in Computational Neuroscience (2019-20)

Computational Neuroscientists build artificial systems and mathematical models to explore the computational principles underlying perception, cognition, memory and motor behaviors; they also apply mathematical machine learning techniques to decode neural data. It is an interdisciplinary endeavour at the intersection of Computer science, Neuro-science, Cognitive psychology, Physics Engineering and Mathematics

SINGLE THRUST AREA OF RESEARCH

- ***Process Control and Automation***
- ***Biomedical Engineering***

The department also has a vision to develop

- 1. Centre of Excellence for Instrumentation Facilities(2015-16)
including calibration and servicing laboratory (NABL accredited)***
- 2. Centre
for Research in Computational Neuroscience (2019 – 20)***

The main focus of this centre is to exploit the opportunity to bring together resources to allow the scientist and collaborators to contribute important advances in understanding the basic relationship between the human mind and brain. A long range goal is to study brain interactions that support our face to face communications with, and awareness of other people's feelings and intentions, human capacities that current imaging experiments do not address.

The department also is planning to do more consultancies and has started communicating to Industries. It is also proposed to have MoU with reputed Instrumentation Industries to carry out the PG diploma courses.

SCHOOL OF COMPUTER, INFORMATION AND MATHEMATICAL SCIENCES

The school of Computer, Information and Mathematical Sciences has been constituted by bringing together closely related departments: Computer Science and Engineering, Information Technology, Computer Applications and Mathematics with an intent to make it as a centre of excellence for imparting quality education and provide

solid foundation in computer engineering, technology and applications and to advance the existing state of knowledge in the fields through leading edge research.

The school has at present 95 faculty with 14 Professors, 8 Associate professors and 73 Assistant Professors who have brought with them fresh expertise that has added to our school's strength in specific strategic areas that we have targeted for development and growth. Many of the staff serve as key national and international panels and in various leadership positions in their field. The strong emphasis of the school is to be vibrant with a dedication to excellence in teaching and research at both the undergraduate and graduate levels.

In recent years, the school addressing design of computer based systems and applications has extended beyond traditional boundaries of computer engineering and sciences and pursuing contemporary topics such as mobile application development. In order to strengthen this research activity the school has established BSAU-APPLE Mobile Application Development Centre at the university.

- ❖ The department of Computer Science and Engineering proposes to establish "Centre of Excellence in Networking & Security". The main thrust area of the department is networking and security issues. Considerable research work is being carried out in this area. The deliverables are in the form of research publications in impact journals. Keeping this in mind, the department has already initiated an M.Tech program in Network Security. The department also focuses on big data Analytics. In tune with the latest technologies the department also initiated a new innovative programme M.Tech (Computer & Predictive Analytics). Another direction the department proposes to pursue is to enhance the collaborative research projects with highly reputed foreign universities.*
- ❖ The department of Information Technology imparts comprehensive knowledge coupled with practical exposure which is essential for software design, development and testing in IT industry. Since the department is actively working in areas of cloud computing and related security issues, the department proposes to establish a dedicated cloud setup for the university so that other departments can also make use of the setup. This framework enhances the research output of the department. Since the thrust areas of the department is Cloud Computing and*

Security. The department proposes to start a “Research Centre in Distributed Computing” and carryout research on information Security and related issues in distributed computing. The department has already initiated a specialized PG program M. Tech (Information Security and Digital Forensics)

- ❖ *The department of Computer Applications produces self-motivated, employable and well committed students for the industries and versatile entrepreneurs to promote IT business globally. Besides imparting quality education, the department also offers various value added services to the university such as maintaining of University website, Internet services, University Data Centre. In view of all these experiences and the research activities that are undertaken in the department, the department proposes to establish a “Centre of Excellence in Mobile Computing Applications and Data Storage Management” and offer training programmes on Remote Infrastructure Management, Virtualization and Cyber Security. Keeping in mind their vision, the department has already initiated M.Tech program in Data and Storage Management.*
- ❖ *The department of Mathematics emphasizes on inter disciplinary research besides teaching both under graduate and Post graduate departments. The main thrust areas of the department is “Bio-Statistical Modeling and its Applications” Since this department function under the school, It proposes to start new PG programmes*

M.Sc., (Algorithms and Machine Learning)

M.Sc., (Scientific Computing)

M.Sc., (Computational Sciences)

SUMMARY

The school proposes to start the following centres and work on different strategies to achieve this vision for 2020.

- *Centre of Excellence in Networking & Security*
- *Research Centre in Distributed Computing*
- *Centre of Excellence in Mobile Computing Applications and Data Storage Management*

STRATEGIES

- *To improve the research output on these thrust areas*
- *To apply various funding agencies*
- *Work force development in these areas*
- *New academic programmes*

PROJECTION OF THE BUDGET

- *Approximately 1 crore*

TIME TO ACCOMPLISH THE TARGETS

- *5 years*

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

To impart quality education, inculcate professionalism and enhance problem solving skills of the students in the domain of Computer Science and Engineering with a focus to make them industry ready, involve in research and contribute to the professional growth.

Vision 2020

- *Focus on creating innovating teaching learning environment with upto date curriculum, well trained faculty and use of innovative teaching methods.*
- *Establish well planned infrastructure to train the students for the current and future needs of the industry*
- *Provide an ambience for the student to have a well-rounded personality through planned programmes*
- *Structure the system for learning in such a way that the student has opportunities to enhance their problem solving skills*
- *Establish the Department as the Centre of Excellence for Research in Networking and Related fields*
- *Increase the Industry-Institute collaboration in academics and research activities*
- *Focus on Funded research activities*

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- *Increase the collaboration with reputed foreign universities in academics and research activities*
 - *Aim for 100% Placement*
 - *Increased number of publications in Reputed indexed National and International Journals and Conferences*

Tangible Milestones

- *Flagship endeavor: Centre of Excellence for Research in Networking and Related fields*

- Teaching: Ambient learning environment that will engage students through a variety mobile, pervasive, ubiquitous devices that can help make Any time Anywhere learning a reality*
 - Infrastructure development*
 - New laboratories in* ○
 - Network security* ○ *Big Data Analytics* ○
 - Ubiquitous Computing* ○
 - Wireless Networking* ○
 - Mobile Device platforms*
 - Funded research* ○
 - Cognitive Science*
 - *Knowledge and information retrieval* ○ *Mobile adhoc sensor networks* ○
 - Software Engineering*
 - International Collaboration* ○ *Working MOUs with International Universities*
 - *Increased International collaborative research projects leading to publications*
 - *State of the art International Conferences in topics of relevance*
 - Student development* ○ *Increased excellence by students in placement, entrepreneurship and research*
 - *Increased participation by students in the co-curricular and extracurricular activities*
 - Academic Research* ○ *Increased publications by Faculty in reputed journals*

□ *Industry Interaction* ○ *Increased involvement of Industry in activities of the Department*

36

DEPARTMENT OF COMPUTER APPLICATIONS

The Department of Computer Applications aspires to provide quality education in the field of computer applications with state of the art computational facilities and undertake quality research in collaboration with industries and universities to produce committed professionals and academicians to meet the needs of the industries and society.

Introduction of New Programmes on Emerging Fields

The department will offer new specialized masters and post graduate diploma programmes in the emerging fields of Data and Storage Management, Mobile computing, Cloud Computing and Computer Networks & Security. MOUs will be signed with corporate and research institutes to provide an optional internship as a part of course work for students in their final year of studies. Opportunities will be offered to the students to acquire international certification in their area of expertise by the end of the programme.

New bachelor programmes will be offered in computer science and applications such as B.Sc (Computer Science), BCA (Computer Applications).

The department will offer inter disciplinary programmes in collaboration with other core engineering departments to develop computer applications in their fields.

Additional language courses in Arabic, Japanese, and French etc., will be offered to the students to maximize their placement opportunities globally.

Adoption of Advanced International Teaching & Learning Process.

The syllabus of the coursework will be structured to train the students and to provide an opportunity to gain expertise in their area of interest. Syllabi will be designed by giving

more focus on the application of the theoretical knowledge they have gained through the course work by allowing students to spend more hours in lab classes under the supervision of experts. The students will be continuously assessed based on the performance in learning the concepts and applying them practically which will provide world standard education and help our students and sculpt our students into world leaders in the field of research and application.

Research

The department will have center of excellence on Computer Networking, Mobile Computing and Big Data Management & Mining. Department will be working along with the government organizations in carrying the projects helping the society. Industrial and research oriented International conferences will be arranged to the students, faculty and to the industry people to present their research work.

Infrastructure Development:

Labs will be equipped with e-Educational Applications and Learning management systems to leverage students and faculty' academic and research thirst. Labs will be operated with network security tools which include: Secure Network Infrastructure, Virtual Private Networks, Identity Services, Encryption, and Security Management.

By 2020 the students of our programmes will be recognized globally and with our standards the global market will be welcoming our students to add value to their organization.

DEPARTMENT OF INFORMATION TECHNOLOGY

By 2020 through excellence innovation in teaching, learning and research the department of Information Technology in BSAU will be recognized by important accrediting agencies, academic community and public.

The department will show proficiency in thrust areas identified, and modern innovative infrastructure will be the target.

There would ample number of sponsored projects and consultancies works in our department with students working for those projects and complete it as part of their academic thesis. In addition to this innovative academic programs and evaluation will be introduced that enhances the on- campus educational opportunities and resources.

As the industry environment and the campus environment differ entirely, practical learning will be encouraged for the entire student including hands on sessions and laboratory sessions. The students will be trained to work in real time projects which can be passed on to the next set of students and so on. Consultancy work can grow from these projects and ample funds will be generated.

With the objective of imparting knowledge relevant to the current scenario in the field of Information System and Networking Technology relating to major segments like Public Sectors, Mobile communication, Media applications and Knowledge Management , two new programmes of M.Tech. (Networking Technology) and M.Tech. (Information System & Technology) have been developed. Curriculum and syllabi of all the programmes in Information Technology department has been developed to provide high quality technical education with a sound footing on basic engineering principles and technical skills. To inculcate professional behavior, strong ethical values and leadership abilities in the young minds so as to work with a commitment to the progress of the nation. Due consideration has been given for growing demands and the changing trends of the software industry and research laboratories.

It is proposed to establish a Centre for Distributed Computing taking in to account of the areas of expertise of the faculty in this department. In order to promote publications in Journals of high impact factor the department has arranged pre-presentations so as to review and to increase the possibilities of publications.

With the world going digital, the need for professionals in the field is growing by leaps and bounds. The requirement for IT professionals is much too greater than the number of IT professionals who graduate every year.

To achieve the above we have highly Qualified, Experienced and dedicated staff members who have knowledge in diversified areas including Cloud and Grid computing, Software Testing, Multimedia and Mobile adhoc Networks and Security.

DEPARTMENT OF MATHEMATICS

- *By the year 2020, the Department of Mathematics would have established itself as a centre of excellence in providing quality education and research ambience in Mathematics and in other interdisciplinary areas of Engineering and Technology.*

In order to achieve this Vision, the Department will focus on :

MISSION

- *Will provide quality teaching to enable students comprehend the mathematical concepts and its applications in the various disciplines of Engineering.*
- *Will contribute to the analytical skills development of students for achieving success in their profession.*
- *Will foster research across the disciplines of Engineering.*
- *Functioning under the school of Computer , Information and Mathematical Sciences , the Department would keep pace in providing state-of-art infrastructure for fostering collaborative research.*
- *Will offer new inter- disciplinary courses like :*
 - M.Sc Algorithm and Machine Learning*
 - M.Sc Computational Science*
 - M.Sc Scientific Computing**Thus enhancing job opportunities to students locally and globally.*
- *The above interdisciplinary courses are to make the students gain knowledge in Applied Mathematics to other fields of Science and Technology.*
- *The Trans disciplinary research motivates the students' interest in related domains of research.*

- *Such a kind of research work in progress in the Department is the Mathematical Modeling in Biostatistics and its Applications.*
- *The main thrust focus of the Department is to emerge as a progressive department imparting good applied Mathematical knowledge thereby laying the foundation for creative and lateral thinking skills.*

SCHOOL OF PHYSICAL AND CHEMICAL SCIENCES

DEPARTMENT OF PHYSICS

The Department of Physics has always laid great emphasis on translational research activities through theoretical and experimental research. The field of materials encompasses concepts in many diverse fields ranging from physics, optics and chemistry to mechanical, electrical and chemical engineering. Under the broad area of Materials Science, the Department intends to pursue research in the thrust areas of Materials Science. These areas have been identified keeping in mind the existing patterns of specialization and also taking into account the emerging areas of interest in the context of recent developments in Materials Science.

The objectives of the department are:

- *Motivate the faculty members to adopt new pedagogy of teaching – learning process.*
- *Introduce integrated P.G. program in M.Sc (Nanoscience) and integrated Ph.D. programme.*
- *Introduce PG programs in M.Sc (Medical Physics) and M.Sc (Bio physics).*
- *The identified areas of research in materials for the next 7 years shall be*
 - *Synthesis and Characterization of Nano materials, nonlinear crystals, organic dyes, Laser and photonic materials.*
 - *Thin films and surface science both by experiment and computational modeling.*
 - *Materials modeling & characterization by computational simulation*
 - *Organic, Inorganic and Semi organic Crystal growth and characterization*
- *Establish an advanced centre for materials research and development*

- *Encourage faculty members to submit at least one project proposal every year by each faculty to the funding agency.*
- *Motivate the faculty members to publish research articles in refereed impact journals – atleast two research articles per faculty per year.*
- *Provide consultancy and live problems to the industries and R&D centres.*
- *File patents in the field of Materials Science, photonics and nonlinear dynamics.*
- *Strengthen the existing nonlinear dynamics lab to the international standard.*
- *Organize international and national seminars, conferences, workshops and short term courses in the chosen area of research.*
- *The ultimate long term vision is to make the physics department as premier department through excellence in Physical Science Education and Research by offering programmes related to emerging fields of physical science and to involve in research in cutting-edge areas.*

DEPARTMENT OF CHEMISTRY

- *The Department will strengthen M.Sc Chemistry Programme by introducing electives needed for the industries, introducing more number of hands - on experiments and projects relevant to the industries so that the employability of graduates will be enhanced.*
- *It is also proposed to diversify M.Sc Chemistry Programme with specialization in*
 - *M.Sc (Green Chemical Technology)*
 - *M.Sc (Pharmaceutical Chemistry)*
 - *M.Sc (Industrial catalysis)*
- *The Department shall take steps to introduce Integrated M.Sc and PhD programmes*
- *The Department will strive to achieve excellence in research in the following areas and will become centre of excellence in the next five years.*
 - *Catalysis*
 - *Materials and Environmental Chemistry*
 - *Organic Synthesis*
- *The Department shall target funded projects to the tune of at least 10 – 15 crores in the next five years.*

- *It is also one of the main objectives of the Department to establish sophisticated instrumentation center to cater the needs of research scholars of the Department, other research scholars of the sister Departments and as a service on payment basis for other research scholars of neighboring institutions and R&D of industries.*
- *Publications in SCI Journals with the high impact factor to boost the image of the Department and the University at National and International level.*

The Department will also focus both for National level collaboration and international collaboration for exchange of research students, faculty members, joint collaborative projects and joint publications

SCHOOL OF ISLAMIC STUDIES

The School of Islamic Studies was started in the year 2010. Previously it was known as Kilakarai Bukhari Aalim Arabic College which was founded by the Chancellor Dr. B.S. Abdur Rahman in the year 2000 to promote “Tomorrow’s ULAMA” - Islamic Scholars. After 10 years of excellence in the field of Islamic Studies, the College has become the School of Islamic Studies under B.S. Abdur Rahman University.

Achievement

Since its inception, the school offers various academic programmes such as B.A.Islamic Studies, Arabic and English medium, M.A.Islamic Studies, M.Phil & Ph.D. Research Programmes. It also offers P.G. Diploma in Business Arabic.

In order to expand the service , the school offers some of its programmes to the working individuals, Business people, Home makers, Senior citizens and all those who desire to learn the revealed knowledge. This growth has been achieved within a short span of three years.

Our main thrust area of research is modern issues faced by contemporary Muslim Ummah with special reference to Muslim Ummah in India and their solutions in the light of Quran and Sunnah.

Vision

The school aims to be a center of excellence and seat of Islamic Studies in the region and world at large. In addition to existing academic programmes, a number of short term and long term programmes in comparative religion, interfaith dialogues, Islamic history & civilization, Islamic finance & banking, Arabic language and translation skills are foreseen.

The school determines to go beyond the traditional classroom type of teaching and learning. It believes that the technology enabled learning, e-learning and distance

education modes are the new generation tools through which the school shall make the knowledge of Islam easily and comfortably reachable to millions of people in the nook and corners of the world within a short Insha Allah. The School shall make a maximum use of any off-campus to be established by the university anywhere in the country or abroad.

Further, networking and collaborating with foreign universities, the school will play a major role in promoting moderate vision of Islam globally which would be regard as one our proud achievements. In total the School of Islamic Studies shall contribute considerably to bring up the name of B.S.Abdur Rahman University as one of the excellent world class universities.

SCHOOL OF SOCIAL SCIENCES AND HUMANITIES

DEPARTMENT OF ENGLISH

VISION

By the year 2020, the Department of English would have established itself as a centre of excellence offering courses in inter-disciplinary subjects in English and Foreign languages and foster research in those related fields. Thereby enabling, empowering and inspiring all community members to fulfill their aspirations to the best of their ability.

In order to achieve the vision stated above, the Department would work on the following aspects:

MISSION

- To become a School of English & Foreign languages.*
- offer challenging curriculum that exposes students to various disciplines in Humanities*
- build up the required infra-structure of the department to support research studies*
- provide consultancy services for facilitating research studies.*
- facilitate studies in translation and literature to develop cultural awareness among students.*
- develop a keen interest among students to pursue higher studies in Humanities subjects.*
- To support knowledge creation through strong M.Phil. and Ph.D. programmes and Post-Doctoral scholars.*
- To be recognized for educational programmes that foster artistic expression, professional skills, intellectual capacity and conceptual development, and integrate these elements within the educational programmes.*
- To offer more job oriented courses such as PG Diploma in Communicative English.*

- *To promote inter-disciplinary research that entails language and literature and widen the research prospects.*
- *To publish research papers and write books and contribute to the literature.*
- *To be committed to student success (employability) and teaching excellence by empowering students to enrich the social, cultural and economic fabric of our nation and the global community.*

CENTRE FOR SPONSORED RESEARCH & CONSULTANCY

Sponsored Research and Consultancy is one of the important arms of a University system. In order to conduct both fundamental and applied research in Science, Engineering and technology in thrust areas, adequate research infrastructural facilities are of prime importance. This could be possible with the help of funds from major funding agencies like Department of Science & Technology, Council of Scientific & Industrial Research, Defence Research & Development, Ministry of Information Technology, etc. With the aid of the funds it will be possible to procure latest equipments and machineries for research in cutting edge areas. Realized the importance of this task, the Centre for Sponsored Research & Consultancy of B. S. Abdur Rahman University is motivating and driving the faculty members to concentrate in submitting research proposals to suitable funding agencies. The Centre has the following objectives to be achieved in the next seven years.

- *Enhance the sponsored research projects and consultancies in the coming years with a target of at least rupees five crores each year.*
- *Encourage each faculty to submit project proposals in their area of specialization.*
- *Offer full assistance from the centre to submit project proposals.*
- *Create research facilities by acquiring latest equipments/ machineries from the grants of funded projects, and sharing the facilities across the Departments.*
- *Improve the International relationship with foreign Universities and research Institutes for collaborative research projects.*
- *Enhance the collaborative partnership between BSAU and Industries and R&D centers.*
- *Undertake research projects aimed at new product/ process development/ new design, etc. in collaboration with sponsoring industries.*
- *Undertake live industry problems as research & Development activities.*
- *Internal monitoring and evaluation of progress of the on-going sponsored projects.*

- *Honorarium to faculty members from the over-head who could mobilize funds from funding agencies as a token of appreciation.*
- *Conduct workshops/ Invited lectures on recent themes for sponsored research projects by inviting experts from the funding agencies.*
- *Conduct Project advisory committee meetings of funding agencies to create awareness among faculty members.*

POLYMER NANO TECHNOLOGY CENTRE

Background:

Polymer Nano Technology Centre (PNTC) was established with the DST Nano Mission fund of Rs 91.6 lakhs and inaugurated by Prof Dr CNR Rao on 24 Aug, 2010.

Dr (Mrs) R. Vasanthakumari is heading the Centre since April 2010.

Overview about the Centre:

Vision : *To pursue world class research, development and applications in nano areas*

Objectives :

- *To develop lab facilities with essential and adequate equipment and instruments.*
- *To create the necessary infrastructure to undertake research work in areas of*
 - *conducting polymer nano fibres, membranes and nanocompositess*
 - *carbon nanofibers*
 - *nano coatings*
 - *nano powders , tubes , wires & rods*
 - *ferro nanofluids and magnetic nanocomposites*
 - *nanodevices design and fabrication*
 - *applications of nanomaterials in medicine, tissue engg, electronics etc*
- *To carry out interdisciplinary research work with Chemistry, Physics and all engineering disciplines.*
- *To have collaborative programs with other institutions and industries.*
- *To offer certificate courses and UG / PG / PhD programmes in Nano Technology.*

Facilities of the Centre - Available

Instruments and equipment available:

Simultaneous DTA/TGA unit

UV Visible Spectrophotometer

Dynamic Mechanical Analyzer (DMA) – DMS 6100

WAXRD (Bruker- D8 Focus)

Universal Tensile Tester – Lab Model

Optical Microscope – Carl Zeiss

Electro spinning Unit (ESPIN) unit

Conductivity unit

Sonicator

Ultra Cryostat circulator

Hot Air Oven - 400°C

High temperature furnace

a) Resource persons Available:

Permanent faculty - 1 (Professor & Director)

Lab Assistant - 1

Research scholars - 9 (full time – 3 , Part time – 5 in which no : registered for PhD – 5 and M.Tech (by research) - 3)

Achievements of the Centre:

Sponsored projects Ongoing : 1 project DST Nano-mission project - Rs 91.6 lakhs

Completed : 2 projects from DIPAS (DRDO) -Rs 9.62 lakhs

2 projects from NRB (DRDO) - Rs 36.4 lakhs

1 project from AICTE - Rs 17.5 lakhs

No: of publications : Journals - 9 (2009- 2012)

Conferences - 16 (2009- 2012)

No: of lectures in nano arranged - 13 (2009- 2012)

No: invited lectures in nano by Director - 10 (2009- 2012)

No: of awards - Best paper awards : 2 (2012)

National awards : 4 (2012)

Facilities r required in next 5 years

a) Instruments and equipment

- 1. Raman Spectrometer***
- 2. Atomic Force Microscope***
- 3. Scanning Electron Microscope***
- 4. Programmable furnace unit for carbonization / graphitization***
- 5. Magnetron coating unit for nano films***

Budget requirement - Rs 1.6 crores

Following instruments will be used from outside research organizations on payment basis

- Vibration Sample Magnetization (VSM) unit***
- XPS***
- TEM***

b) Resource persons required in 5 years:

- 1. Scientific Assistants – 2 no:s***
- 2. Scientific Officers - 2 no:s***
- 3. Scientists - 2 no:s***
- 4. Research scholars - 10***

CENTRE FOR INTERNATIONAL COLLABORATION

The Centre for International Collaboration will develop a coherent strategy to promote B.S.Abdur Rahman University's international relations, global profile and international competitiveness, promoting deeper engagement with key countries and regions in establishing

International collaborations in research and education

International educational experiences for all students Integration of international academic staff and students International student recruitment and funding.

Establishing international centers of excellence in partnership with international agencies like UNESCO.

The Centre will offer advice to the Schools, faculties and departments in developing and scaling up international collaborations. The centre will take up responsibility for ensuring appropriate due diligence with respect to international agreements, and for implementing other aspects of the international protocols and agreements.

The centre will deal with University-wide strategic partnerships, monitoring and implementation of agreed international strategies, co-ordination of overseas visits by senior University representatives and inward visits by senior overseas delegations, and engagement with national and international agencies

Establishing a comprehensive centre for international collaboration with facilities for students and faculty, reference section, training area, counseling centers, display area, seminar halls, video conferencing facility, etc.

IMPORTANT AREAS OF FOCUS FOR REALISATION BY 2020

- 1. International students recruitment, 20% of the overall strength of students.*
- 2. Developing strategic joint academic programs with reputed universities abroad.*
- 3. Developing joint research supervision for Ph.D candidates with co-guides from reputed universities abroad.*
- 4. Facilitating recruitment of international faculty.*
- 5. Facilitating the development of international research centers.*
- 6. Facilitating BSAU faculty to teach in universities abroad to gain international teaching experience, under faculty exchange program.*
- 7. Developing vibrant semester abroad programs in all disciplines*
- 8. Facilitating research internships for research scholars in reputed Universities and laboratories abroad for six months to one year.*
- 9. Strengthening international student exchanges for technical experience through IAESTE, International association for the exchange of students for technical experience.*
- 10. Strengthening international exposure to students through DAAD fellowships for German collaborative student programs.*
- 11. Developing the image of the university in the international stage by adopting the international best practices progressively.*

12. Strengthening the centre for international collaboration into a very comprehensive unit catering to the needs of

i) International students' recruitment, student exchanges

ii) International faculty exchanges iii) International

internships for students and researchers

iv) Higher education facilitation, through education fairs, counseling, seminars, partnering with consulates and embassies of developed countries.

v) Fostering international collaborating agreements with reputed universities and international research centers and agencies.

vi) Partnering with international organizations, Consulates and embassies of various countries.

vii) Training faculty to apply for international research grants like Fulbright, UKIERI, Endeavor Fellowships, Indo-Australian strategic fund, Indo-Canadian, DAAD, etc.

viii) Developing a very comprehensive international reference section

ix) Conducting capacity building programs for students and faculty to engage with international opportunities and programs

x) Fostering support for international students and faculty

13. Developing world class facilities and ambience in the campus for attracting international students and faculty at the university.

14. Facilitating the visits of Nobel Laureates and renowned scholars and experts for interaction with faculty and students.

15. Creating international hostel and guest house for international students, faculty.

TARGETS AND TIME FRAME:

1. Infrastructure:

By July 2015, every school of the University should have its identity in the campus and should be housed in its own school building. Besides, the current infrastructure and amenities of students as well as faculty needs to be substantially improved and increased. The following buildings need to be completed by July 2015.

Building	Amount in Lakhs
Crescent School of Architecture	800
Crescent Business School	800
Crescent Library	800
University Administrative blocks	600
Student complex with cafeteria, indoor hall, books and stationery store, food courts, etc.,	600
Multistoried Staff Quarters – 100 apartments	600
International Boys Hostel – 200 Capacity	600
Fifth Boys Hostel – 1000 Capacity	600
Girls Hostel – 500 Capacity	600
Total approximately	6000

LIBRARY

The University shall construct an independent building of about 30,000 square foot floor space and this will have to be fully automated, RF-10 and remote access of E-resources. It shall target a 2,00,000 books and 25,000 E-resources. The Library shall work to join consortiums for sharing of E-resources.

CAMPUS ENERGY PLANNING

The University shall work for making a Green Campus with maximum exploitation of solar energy to supplement through energy demand, enhance rain water harvesting and storage, create one water body in the Campus, Multiple STPs near hostels, and enhance Waste Water Treatment capacities.

MEASURES FOR GREEN CAMPUS:

The various measures to make the University Campus as green campus are

- **Solid waste – bio composting, recycle and land fill.**
- **Bio gas plant installation**

- Liquid was – Multiple STPs to enhance the trademark capacity
- **Plastic free campus**
- Laying bicycle trucks to avoid noise and air pollution in campus
- **Harnessing solar energy**
- Conservation of water and energy by suitable mechanism
- **Rain water harvesting**
- More importantly awareness creation through Green Club.

FACULTY STATISTICS

Sl. No.	Department	Prof. of Emin.		Prof		Adj. Prof		Associ. Prof		Asst) Prof. Sel.Gr		Asst) Prof. Sr. Gr		Asst. Professor		Visiting Prof. / Faculty		Faculty		Others		Total		Grand Total
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	Vice Chancellor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
2	Registrar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
3	Director (Adms)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
4	Director (CSRC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
5	Director (HR) & PT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
6	CIVIL	-	-	2	2	-	-	-	2	-	2	1	1	8	6	1	-	-	-	-	-	12	13	25
7	MECH.	2	-	7	-	-	-	1	1	3	-	5	2	25	-	-	-	-	-	-	-	43	3	46
8	Automobile	-	-	2	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	4	-	4
9	EEE	1	-	3	1	-	-	2	-	1	-	-	-	2	12	-	-	-	-	-	-	9	13	22
10	CSE.	-	-	2	4	-	-	-	3	-	-	3	5	5	12	-	-	-	-	-	-	10	24	34
11	ECE	-	-	4	1	-	-	1	2	-	-	1	-	7	21	-	-	-	-	-	-	13	24	37
12	E& IE	-	-	1	2	-	-	1	-	-	-	1	-	1	6	-	-	-	-	-	-	4	8	12
13	PT	-	-	1	1	-	-	-	-	-	-	-	-	2	3	-	-	-	-	-	-	3	4	7
14	IT	1	-	-	1	-	-	1	1	2	1	2	5	1	7	-	-	-	-	-	-	7	15	22
15	CA	-	-	2	1	-	-	2	-	1	1	1	3	5	3	-	-	-	-	-	-	11	8	19
16	CBS	-	-	2	1	1	-	1	-	1	1	-	1	3	9	-	-	-	-	-	-	8	12	20
17	CSA	-	-	2	-	-	-	1	-	-	2	-	-	1	3	2	3	-	-	-	-	6	8	14

18	Aerospace	-	-	1	-	-	-	1	-	-	-	-	-	2	2	-	-	-	-	-	-	4	2	6
19	Maths	-	-	3	-	-	-	-	1	2	1	4	-	3	4	-	-	-	-	-	-	12	6	18
20	Physics	-	-	2	1	-	-	-	-	1	-	3	1	2	1	-	-	-	-	1	-	9	3	12
21	Chemistry	-	-	2	2	-	-	-	2	1	-	-	-	4	3	1	-		-	-	-	8	7	15
22	English	-	-	-	3	-	-	-	1	-	-		1	2	2	-	-	-	-	-	-	2	7	9
23	PED	-	-	-	-	-	-	-												2	1	2	1	3
24	Library	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
25	Moral Instructor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	CIAS & GA	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
27	Islamic studies	-	-	1	-	-	-	-	-	-								5	-	-	-	6	-	6
Total		4	-	38	20	1	-	11	13	12	8	21	19	75	94	4	3	5	-	9	1	180	158	338

Department-wise / Gender-wise list

Department-wise / Qualification-wise list

Sl. No.	Branch	Ph.D	Pursuing Ph.D	Non Ph.D	Total
1	CIVIL ENGG.	7	10	8	25
2	MECHANICAL ENGG.	10	12	24	46
3	AUTOMOBILE ENGG.	2	-	2	4
4	ELECTRICAL AND ELECTRONICS ENGG.	6	5	11	22
5	COMPUTER SCIENCE AND ENGG.	6	13	15	34
6	ELECTRONICS AND COMMUNICATION ENGG.	4	7	26	37
7	ELECTRONICS AND INSTRUMENTATION ENGG.	3	1	8	12
8	POLYMER TECHNOLOGY	2	2	3	7
9	INFORMATION TECHNOLOGY	2	13	7	22
10	COMPUTER APPLICATIONS	4	9	6	19
11	CRESCENT BUSINESS SCHOOL	5	12	3	20
12	CRESCENT SCHOOL OF ARCHITECTURE	-	2	12	14
13	AEROSPACE ENGG.	1	-	5	6
14	DEPARTMENT OF MATHEMATICS	7	5	6	18

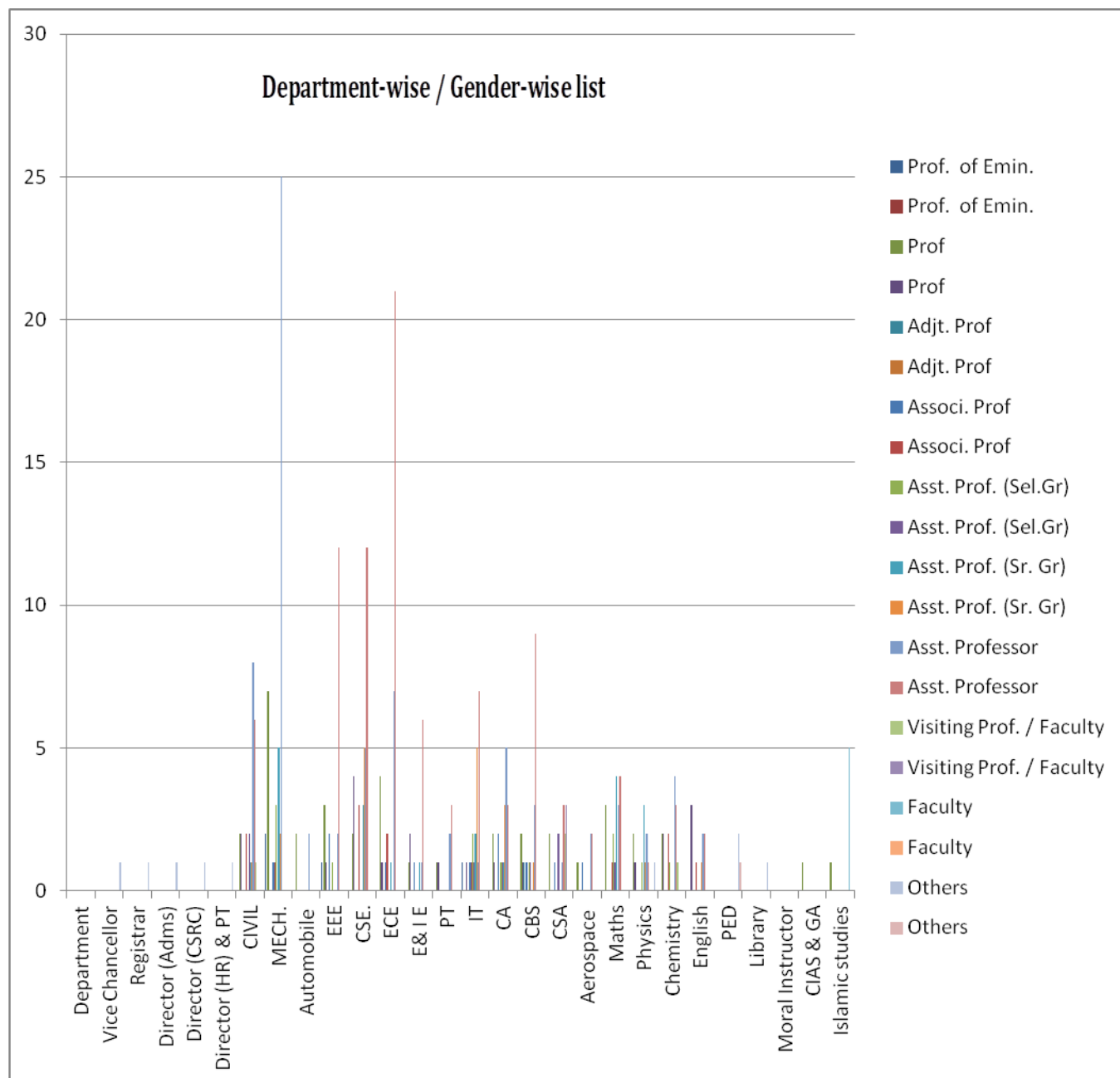
15	DEPARTMENT OF PHYSICS	7	3	1	11
16	DEPARTMENT OF CHEMISTRY	14	1	-	15
17	DEPARTMENT OF ENGLISH	4	4	1	9
18	LIBRARY	1	-	-	1
19	PHYSICAL EDUCATION DEPARTMENT	2	-	1	3
20	PLACEMENT CELL	-	-	1	1
21	CRESCENT IAS ACADEMY	-	-	1	1
22	SCHOOL OF ISLAMIC STUDIES	1	2	3	6
23	OTHERS (V.C., Registrar, Director (Admissions), Director (SRC) and Scientist Grade. II)	4	-	1	5
	TOTAL	92	101	145	338

Minority faculty – Muslim / Christian

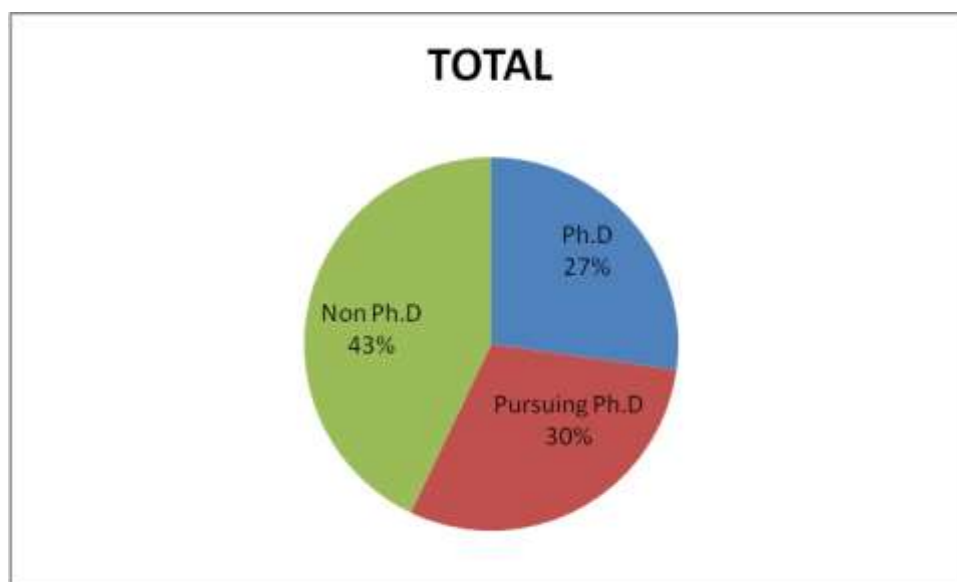
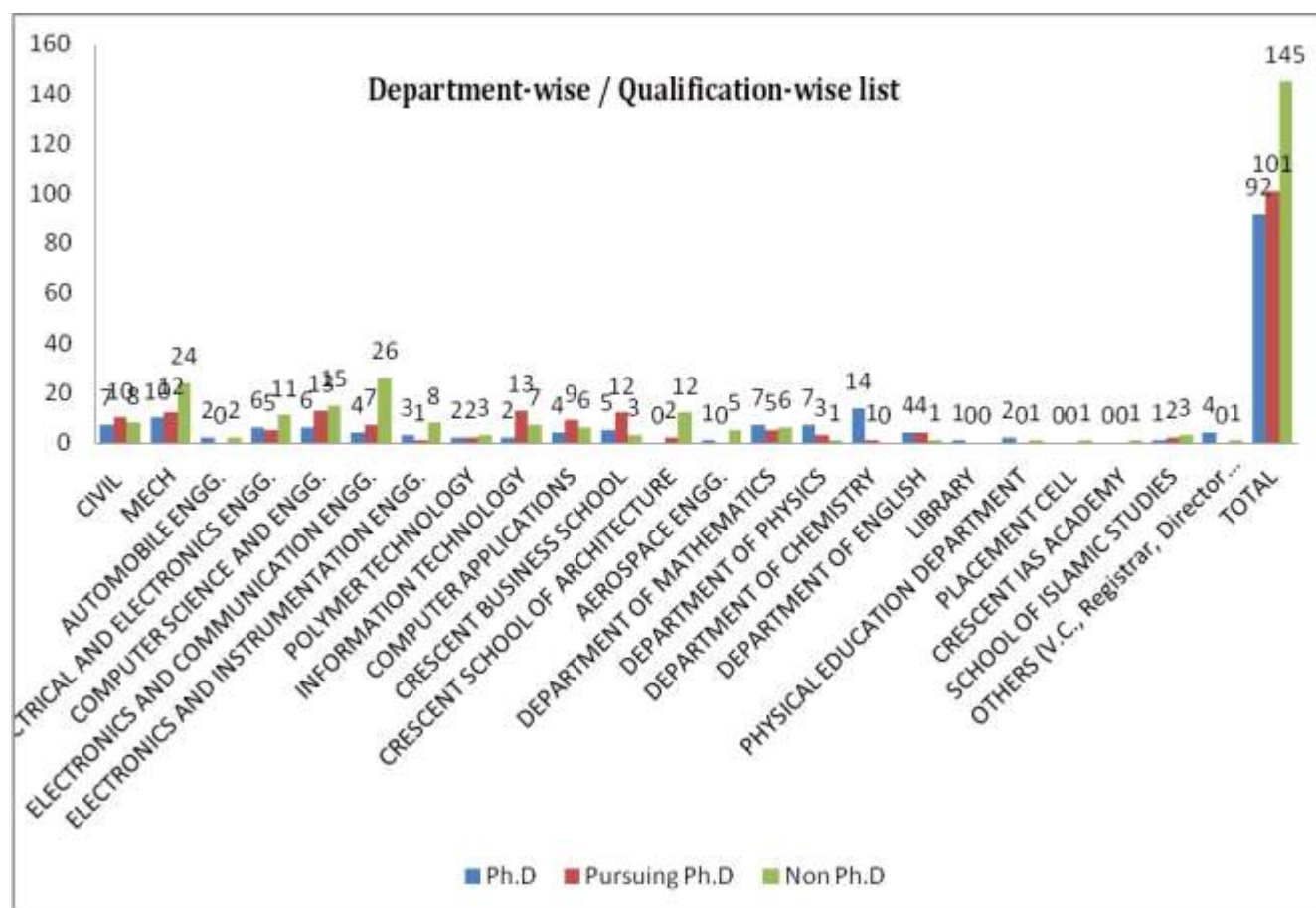
Sl. No.	Branch	MUSLIM		CHRISTIAN		OTHERS		TOTAL		GRAND TOTAL
		MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	
		A	B	C	D	E	F	G (A+B+E)	H (B+D+F)	
1	CIVIL ENGG.	9	2			3	11	12	13	25
2	MECHANICAL ENGG.	13	2	1		29	1	43	3	46
3	AUTOMOBILE ENGG.			1		3		4		4
4	ELECTRICAL AND ELECTRONICS ENGG.	4	2		1	5	10	9	13	22
5	COMPUTER SCIENCE AND ENGG.	6	5		3	4	16	10	24	34
6	ELECTRONICS AND COMMUNICATION ENGG.	3	2	1	4	9	18	13	24	37
7	ELECTRONICS AND INSTRUMENTATION ENGG.	1	3			3	5	4	8	12
8	POLYMER ENGG.	1	2			2	2	3	4	7
9	INFORMATION TECHNOLOGY	1	4		1	6	10	7	15	22
10	COMPUTER APPLICATIONS	9	3		1	2	4	11	8	19

11	CRESCENT BUSINESS SCHOOL	3	2	2		3	10	8	12	20
12	CRESCENT SCHOOL OF ARCHITECTURE		1	1	1	5	6	6	8	14
13	AEROSPACE ENGG.	1				3	2	4	2	6
14	DEPARTMENT OF MATHEMATICS	3	2	1	1	8	3	12	6	18
15	DEPARTMENT OF PHYSICS	4	3			4		8	3	11
16	DEPARTMENT OF CHEMISTRY	3	2		1	5	4	8	7	15
17	DEPARTMENT OF ENGLISH	1	2		2	1	3	2	7	9
18	LIBRARY	1						1		1
19	PHYSICAL EDUCATION DEPARTMENT	1				1	1	2	1	3
20	PLACEMENT CELL	1						1		1
21	CRESCENT IAS ACADEMY	1						1		1
22	SCHOOL OF ISLAMIC STUDIES	6						6		6
23	OTHERS (V.C., Registrar, Director (Admissions), Director (SRC) and Scientist Grade.II)	2				3		5		5
	TOTAL	74	37	7	15	99	106	180	158	338

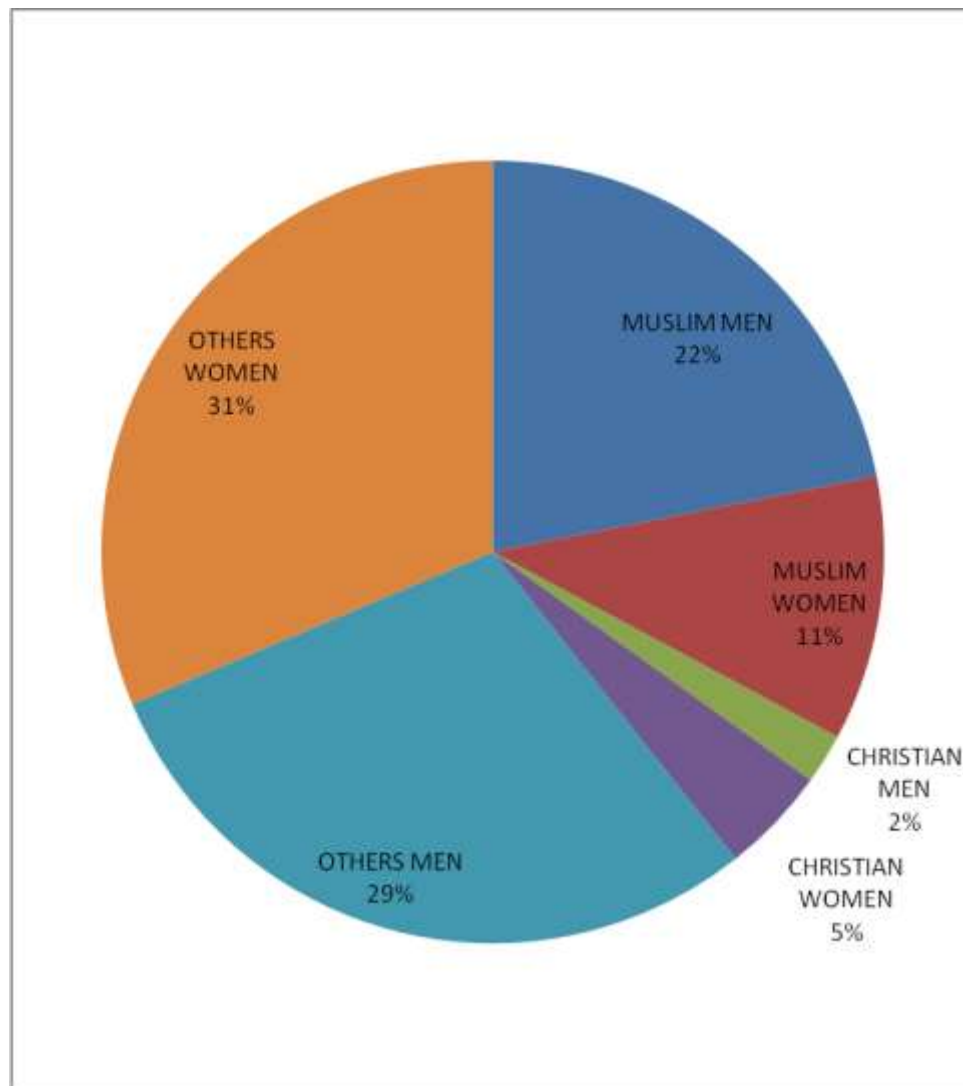
Department-wise / Gender-wise list

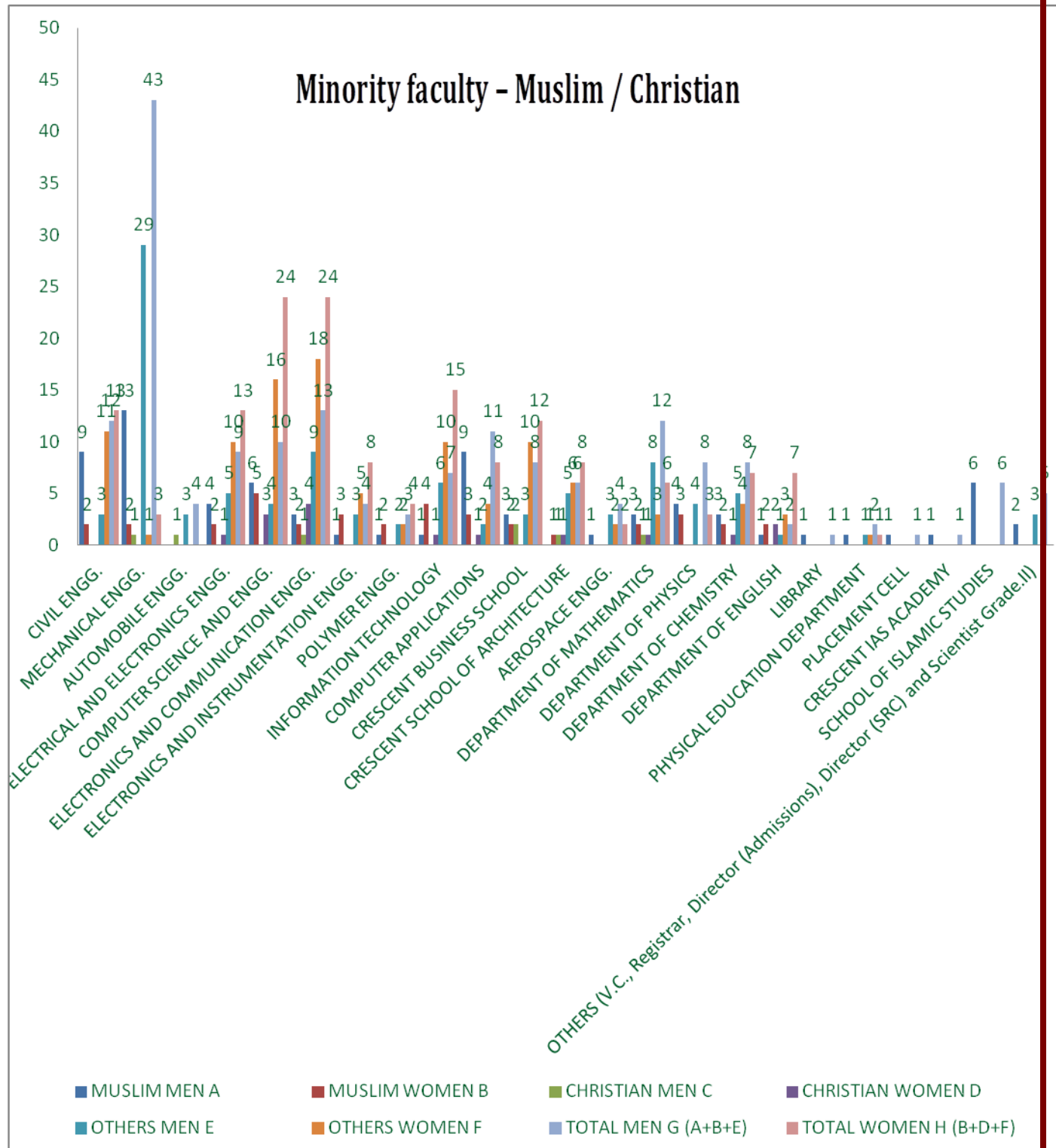


Department-wise / Qualification-wise list



Minority faculty – Muslim / Christian





THE GOALS TO ACHIEVE

BY 2020

	Before 2009 (Since incept from 1984)	After 2009 (Three Years)	Vision 2020
Infrastructure			
Campus Area	50.19 acres	50.50	
Build Area	71.354 Sq. mts.	106948 Sq. mts.	140000 Sq.mts.
Power backup	60%	100%	100%
Wifi	None	100%	100%
Hostels	878 (Boys) + 300 (Girls)	1500 (Boys)+350 (Girls)	4000+1500 (25 capacity)
Guest House	None	1	
Academics			
Student	2411	4365	10000
Demographic Diversity	0.5%	1%	30%
Faculty	229		500
Schools			
Departments	None	336	12
Teaching Programmes		10	
UG	10	18 + 4 (from year 13-14)	25
PG			
Proposed from 2013 – 14	8	12	15
(PG Life Sciences)	8+4 (Ph.D)	19+18 (Ph.D)	25 + 25 (Ph.D)
Laboratory Equipments		4 (Total 41)	
	34.63 Crore	10 Crore	100
Research & Consultancy			
Training Programmes	31	35	50
Department recog. for Ph.D	6	18	25
Research Supervisors	31	84	300
Scholars on Roll	66	249	1000
No. of Conferences / Symposiums organized	49	150	50/year
Papers Published	670	1304 in 3 years	1000/year
Ph.Ds to be produced			200/year
Sponsored Projects	17 (Rs. 145.16 lakhs)	14 (Rs. 320.90 lakhs)	2000 lakhs
Consultancy Projects	9.7 Lakhs	4.95 Lakhs	100 lakhs

WHAT WOULD WE LIKE TO SEE AT BSAU BY 2020

AMBIENCES:

- 1. A University with a Green and Clean Campus which should awe struck every student and parent who enters for the first time.**
- 2. A University that upholds the highest value of education, an ambience that inspires the students and teachers.**

ACADEMICS AND INFRASTRUCTURE:

- 3. Ten Schools with their independent buildings and identity with sufficient space for teaching and research.**
- 4. All laboratories shall have state-of-the-art facilities both for teaching and research.**
- 5. The campus shall have atleast 400-500 overseas students.**
- 6. The Campus shall atleast one overseas Visiting Faculty in every department at a given time.**
- 7. The University shall be one of the top notches Research University amongst all the private and Deemed Universities.**
- 8. It shall have established two sophisticated Instruments and Analytical (Research) Laboratories to boost high quality research in Engineering and Science disciplines.**
- 9. The Library shall have independent building. It shall have a remote access portal for all the E-resources.**
- 10. The Campus shall have amenities centres such as Cafeteria, Food Court, Indoor Recreation Hall, and Stationery & Book Store.**
- 11. The Campus shall have Laundry, Saloon and Parlour for Women.**
- 12. The Campus shall have moderately equipped Health Centre with 24 hours Service and at least 10 beds.**

ADMINISTRATION:

13.It shall have a well structured administrative system with decentralized responsibilities. Total automation of Administration, Examination and Finance.

ACKNOWLEDGEMENT :

I wish to place on record the enthusiasm and willingness of each one of our faculty to go with the pace of growth which has been envisaged in recent times. Our senior colleagues Prof. V. Sankaranaraynan, Prof. V.M. Periasamy, Prof. T.R. Rangaswamy Prof M.. Abdullah Khan, Prof. R. Ganesan, Prof. Nithiyanandam have made enormous contribution to the growth of this institution and given a leadership which has led to a sound foundation for further growth. Mr. V.N.A. Jalal, Director of Admissions is apparently the heart and soul of every happening on the campus.

The Vision of the Founder Alhaj Dr. B.S. Abdur Rahman and the trustees, the members of the Board of Management have put all their might and vision into this institution which has brought it to the present status of competence and ability. The Chairman, Mr Abdul Qadir A. Rahman Buhari with his active involvement into all policy matters and visionary planning will certainly lead this University to attain the set goals of excellence by year 2020.

Prof. J. A. K. TAREEN

Vice Chancellor