

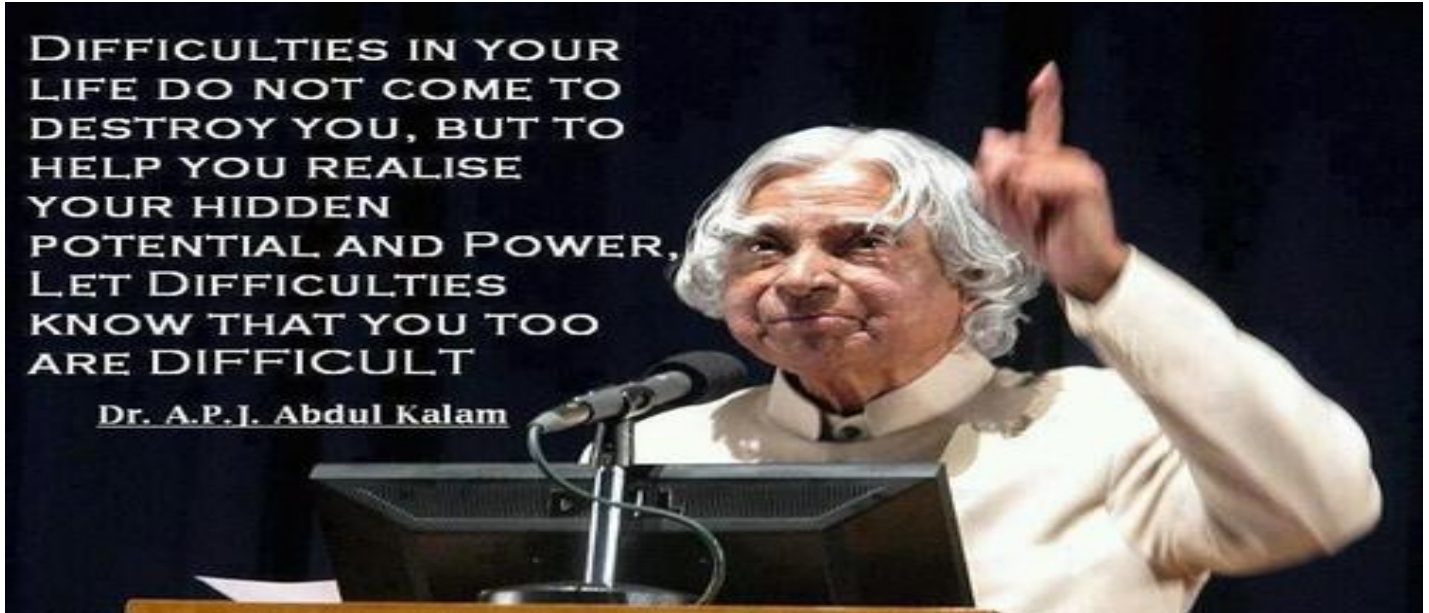


# BITS NEWS E-BULLETIN



UNDER CSI

## DEPARTMENT OF INFORMATION TECHNOLOGY



IT is the area of managing technology and spans a wide variety of areas that include computer software, information systems, computer hardware, programming languages but are not limited to things such as processes, and data constructs.

IT professionals perform a variety of functions (IT Disciplines/Competencies) that ranges from installing applications to designing complex computer networks and information databases. A few of the duties that IT professionals perform may include data management, networking, engineering computer hardware, database and software design, as well as management and administration of entire systems.

**Teacher In-charge**  
**Ms. P. R. Maidamwar**

**Program Coordinator**  
**Prof. N. A. Chavhan**

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**Animekh Misra**  
**(V Sem)**

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**(III Sem)**

## Department Vision and Mission

### Vision

- To achieve excellent standards of quality education by keeping pace with rapidly changing technologies.
- To create technical manpower of global standards with capabilities of accepting new challenges in Information Technology.

### Mission

- To create competent and trained professionals in information technology who shall contribute towards the advancement of engineering, science and technology & useful for the nation.
- To impart quality and value based education to raise satisfaction level of all stakeholders.
- To apply new developments in Information Management and provide all possible support to promote research & development

## Programme Educational Objectives

The educational objectives of the Information Technology programme are designed to produce competent engineers who are ready to contribute effectively to the advancement of information technology causes and to accommodate the needs of the profession. The graduates shall:

1. Practice Information Technology in the general disciplines of design, development & deployment of software and integration of existing technologies for e-governance nationwide.
2. Apply fundamental technical knowledge and skills to provide workable solutions to problems in various areas of IT.
3. Pursue higher education, research and development and deploy creative efforts in the area of Information Technology.
4. Use the acquired knowledge in societal and environmental sensitive manner with professional ethics in a team.

## Programme Outcomes

1. **PO1: Apply the knowledge of mathematics, science, engineering skills and information technology deployment that will contribute towards the advancement of engineering, science and technology & useful for the nation.**
2. **PO2: Identify, formulate, investigate, analyze & conduct investigations of complex engineering problems using state of the art knowledge and research methods, analysis and interpretation of data, and synthesis of the information to provide valid conclusions & solutions.**
3. **PO3: Develop solutions for complex engineering problems and design system component or processes that meet the specified needs considerations for public health and safety, and the cultural, societal, and environmental considerations.**
4. **PO4: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling of complex engineering activities, with an understanding of their limitations.**
5. **PO5: Apply contextual knowledge to assess societal, environmental, legal, health, safety, cultural and ethical issues and the consequent responsibilities relevant to IT profession.**
6. **PO6: Function effectively as an individual and as a member or leader in diverse teams and in multi disciplinary environment.**
7. **PO7: Communicate effectively on complex engineering activities with the engineering community and with society at large, through reports, make effective presentations and give and receive clear instructions.**
8. **PO8: Demonstrate knowledge and understanding of project management, finance management principles and systems working and apply these to manage large IT projects in multidisciplinary environments.**
9. **PO9: Recognize the need for independent and lifelong learning to remain active in profession and for personal growth.**

## **PRE-REGISTRATION SEMINAR CONDUCTED FOR PH.D. SCHOLARS IN IT DEPARTMENT FOR JANUARY-2016 AT GHRCE, NAGPUR**



G. H. Raisoni College of Engineering, Nagpur is approved research center for Higher Learning of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. To bring seriousness among the Research Scholars and to check efforts put in by the candidate for problem identification before registering for doctoral studies, GHRCE is conducting Pre-registration seminar.

Pre-Registration seminar was held on 8<sup>th</sup> January 2015 for Information Technology Department in conference hall. Dr. P. R. Bajaj, Dr. U. S. Wankhede(Dean R&D), Dr. S. D. Giripunje(Associate Dean R&D) , Dr. L. G. Malik(HoD CSE), Prof. N. A. Chavhan (HoD IT), Dr. Kriplani and Mrs. J. J. Shah (R&D Coordinator) were experts present for the seminar.

Ms. Archana Raut , Ms. Sofia Pillai , Ms. Amreen Khan , Ms. Sampada Wazalwar , Mr. Chetan Dhule and Mr. Girish Talmale presented their research topic in front of experts. The experts suggested corrections in their title, objectives and methodology of work.



## GUEST LECTURE BY MS. NIDHI SINHA ON HADOOP & PYTHON



Department of Information Technology ,G.H .Raisoni College of Engineering, Nagpur had organized Expert Lecture on the new technologies “**Big Data & Hadoop**” on 20<sup>th</sup> January 2016 for IV & VI semester students. The resource person was **Ms. Nidhi Sinha, NIIT Nagpur.**

Ms. Nidhi started lecture by explaining about Big Data Generation or information explosion and its reasons. Later she elaborated on properties of Big Data. She discussed about structured and unstructured data and how to handle unstructured data. Finally, she emphasized on the need of learning various Tools/skills like Hadoop and Python for handling Big Data. Being a Consultant working in the area of Big Data Technologies and predictive analysis, she cited some of the issues and challenges in area of Big Data Analysis, which can be taken up in the Software product development.

Later speaker informed students about NIIT training courses which are on the most dominant technologies and platforms being used by today’s enterprises. Also NIIT’s curriculum ensures that students gain a thorough grounding on all critical concepts of technology, soft skills and grooming. Such training and global certifications are what graduates need for an easy entry into different industries, which are currently facing a huge shortage in skilled manpower resources.

The session was highly interactive and queries of students were clearly answered.

## **GUEST LECTURE BY MR. AMOGH CHITNIS ON OOPS & JAVA**



Department of Information Technology ,G.H .Raisoni College of Engineering, Nagpur had organized Expert Lecture on the topic “**OOPS & Java**” on 22<sup>nd</sup> January 2016 for IV semester students. The resource person was **Mr. Amogh Chitnis, Software trainer and developer – IT NetworkZ, Nagpur.**

In this lecture, **Mr. Amogh Chitnis**, started with the introduction of what exactly is Object oriented programming & Java. He introduced the basic and most important features of Java with examples to lay a strong foundation.

The speaker discussed various upcoming technologies like Hibernate, Struts and Spring. He also spoke of the life cycle of servlets and talked about the need of application server and web server. JAVA programming enables secure and high performance software development on multiple platforms. Many companies in India have well-qualified software engineers having expertise in Java, Java Script, J2SE, JSP, and J2ME. JAVA Programming Services help our businesses to do better. They provide variety of Java development services including project solutions.

The session was highly interactive and queries of students were clearly answered.

## UG PROJECT COMPETITION ORGANIZED BY DTE REGIONAL OFFICE IN ASSOCIATION WITH GHRCE, NAGPUR



Project Competition was organized on 18 January '2016 by DTE Regional Office, Nagpur in association with G. H. Raisoni College of Engineering. Mr. Gulabrao Thakre, Jt. Director, DTE and Ms. Ashwini Gayatri, Head, e-Mission, Department of Information and technology, Govt. of Maharashtra were the chief guest.

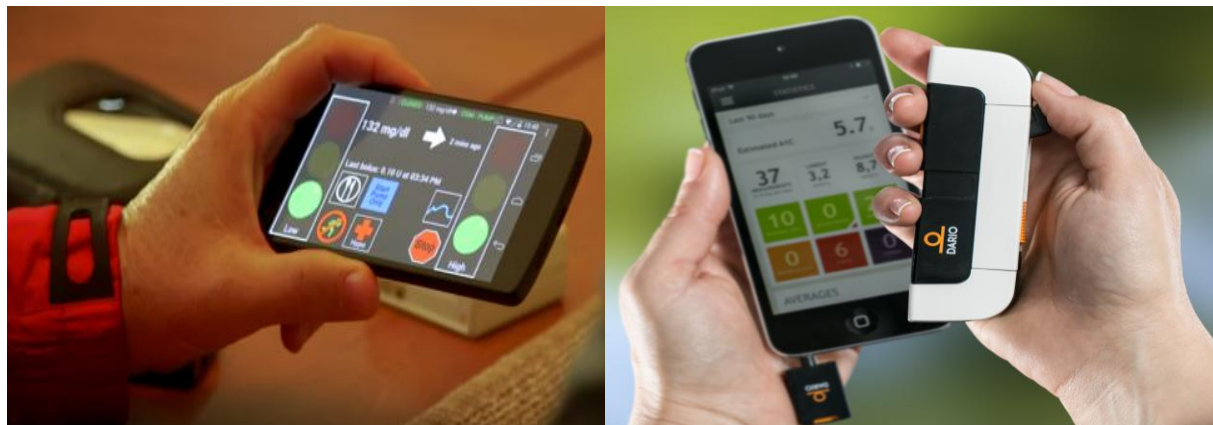
Our student's Animekh Misra, Anki Agawal, Nikhilesh Mandal, Diksha Gunnewar from VI Semester IT presented E –governance project titled “Securized voting system” under the guidance of Prof. S. A. Chhabria and received runner up prize.

This Project-Competition was a platform for young innovators and aspirants who are passionate in meeting challenges of days to come. This provided platform for budding youngsters to showcase their hidden talents through their models.



Dr. P. R .Bajaj & Prof. N. A. Chavhan (HOD-IT) congratulated the students for the success of exhibition.

## **SMARTPHONE SYSTEM TREATS TYPE-1 DIABETES**



People suffering from type 1 diabetes may soon be able to ditch constant finger pricks and manual insulin injections - if they have a smartphone on hand, that is.

Combined with a tiny sensor and wearable insulin pump, a smartphone can stand in for a pancreas, automatically monitoring blood-sugar levels and delivering insulin as needed, researchers report. The system, backed by a \$12.6 million grant from the National Institutes of Health, will enter two final phases of international trials this year.

The system works with a readily available blood-glucose sensor - about the size of a flash drive - that can be worn in a variety of places on the body, such as an arm, leg, or the abdomen. The sensor reads blood-glucose levels every five minutes and wirelessly reports the results to a specially designed app on a nearby android smartphone. The app's algorithm analyses the data and wirelessly controls a discreet, wearable insulin pump, which can be hooked to a belt or other piece of clothing. The pump has a very fine needle that delivers insulin into the blood stream.

These patient-specific short ranges of healthy blood-glucose levels are easier targets that can be stably maintained, avoiding constant adjustments that can lead to swings, Francis Doyle III, dean of Harvard's Paulson School of Engineering and Applied Sciences said.