B.Tech Computer Science Engineering

(In Collaboration with IBM)

Shri Vaishnav Vidyapeeth Vishwavidyalaya is offering following two new programs in association with IBM

- **B. Tech. in Computer Science Engineering with Specialization in Big Data Analytics (In association with IBM)**
- **B. Tech. in Computer Science Engineering with Specialization in Cloud & Mobile Computing (In association with IBM)**

Software today has revamped transactions and experiences, be it while travelling, shopping, and banking, connecting with friends or performing any other routine task. Information Technologies has changed the way business processes happen and have also enabled linking of entire globe empowering people with connections. Today Enterprises are facing dearth of professionals in vertical domains of Computer Engineering.

The International Business Machines Corporation (commonly referred to as IBM) is an American multinational technology and consulting corporation, with headquarters in Armonk, New York, United States. IBM manufactures and markets computer hardware and software, and offers infrastructure, hosting and consulting services in areas ranging from mainframe computers to nano-technology. Today Enterprises are facing dearth of professionals in vertical domains of Computer Engineering.

Shri Vaishnav Vidyapeeth Vishwavidyalaya has collaborated with IBM's Software Group to roll out degree programs that are jointly developed and certified to make sure the students have the best from the both the worlds of Academia and Industry. These programs are intended to bridge the gap between the Industry and Academia.

Specialization Program includes following benefits:

- Industry Relevant curriculum jointly developed with academicians and IBM Professionals
- Courseware, books and material for each student jointly prepared with academicians and IBM Professionals
- Skilling students in depth with concepts leading to specialization
- Professional certification by IBM
- Curriculum caters to various skill requirements of organization worldwide including Banks, Computer Services, Education, Healthcare, Insurance, Manufacturing, Retail and other industries.
- Certificate from IBM on the completion of the Program.
- IBM Business Analytics and Cloud & Mobile Computing Lab setup at SVVV.
- Latest software content, real-world industry experiences, hands on lab courses, best practices and case studies for the participants.
- Access to various IBM centers for live industry experience.
- Opportunity to visit IBM centers for live industry experience.
- Opportunity to participate in various National/International award winning contests.

IBM Software Lab

IBM has setup an IBM Big data Analytics and IBM Cloud Computing Lab in the svvv campus. The program is delivered by IBM subject matter experts.

❖ **Big Data Analytics**

This program helps to make career in Big Data Analytics. Huge amount of raw, semi-structured and unstructured data is generating at uncontrollable pace. It features data as assets which can be used for analyze, correlate and predict. In almost every organization, there is a requirement of Data Scientist and Data Analyst to perform data oriented task. Expertise in Big Data Analytics domain leads to handling of business intelligence, large scale data mining and data warehousing projects. Course covers dynamic paradigm in business analytics & optimization, data warehousing & multi-dimensional modeling, Business Intelligence, and Web & Graph Analytics.

❖ **Mobile Computing**

With the rapid technological advancements in mobile technology, integrated circuitry and increases in computer processor speeds, the future of mobile computing looks increasingly exciting. Mobile Computing is the ability to use portable computing devices in wireless enabled networks to stay connected and access data while on the move. As demand of technological environment in new era of computing technology, we offer B. Tech. in CSE with specialization in mobile computing. The course objective is to provide students with an understanding of mobile

computing technologies and how these technologies are utilized and integrated to meet specific business needs. The stream of Mobile Computing is specialization and expertise oriented. The course also builds a solid foundation of software development skills and introduces the specific skills needed for developing mobile applications. Students will also gain a necessary understanding of current technologies and architectures that provide the network and communications infrastructure for mobile-enabled enterprise computer systems. Students will also develop skills in the design of modern network systems, using appropriate technologies, architectures and techniques.

The career in mobile and wireless workforce is very demanding now days. Escalating use of wireless devices such as smart phones, notebooks, cell phones and laptops has generated motivation as well as competition to ensure these tools function effectively and securely

- Mobile Solution Specialist
- Mobile Application Developer
- Mobile Architect / Mobile Software Platform Architect
- Telecommunications Tower Installation and Maintenance Engineer
- Mobile Security Expert
- Mobile Phone Verification Manager

❖ Cloud Computing

Cloud computing (or 'on-demand computing') is a key distributed systems paradigm which has been gained much attention during the last few years. Cloud computing is a type of Internet-based computing, where data, information and shared resources are made available to computers and other devices on-demand. Cloud technologies are ubiquitous, affecting our routine lives any moment we access the World Wide Web, use a mobile app, or go for online transactions. Cloud computing and storage solutions provide users and enterprises with numerous competencies to store and process their data in third-party data centers. Cloud computing is a model for facilitating pervasive, suitable, on-demand network access to a common pool of configurable computing resources such as webs, servers, storage, applications and services that can be quickly provisioned and freed with nominal management effort. Clouds are also the de facto infrastructure for "Big Data" applications. Though advanced Cloud services are offered by IT companies, Cloud computing is also grounded in introductory distributed systems and scalable software systems principles, and is an active research field for the academic community.

Following courses offered by IBM

Big Data Analytics

- Software Foundation and Programming 1

- Software Foundation and Programming 2

- Object Oriented Programming

- Information Management Basics

- Enterprise Reporting Using Business Intelligence

- Foundation in Big Data using Hadoop

- Big Data Programming

Cloud & Mobile Computing

- Enterprise Application Development

- Mobile/Hybrid Application Development

- Enterprise Mobile Applications Development &Deployment

- Software Foundation and Programming 1

- Software Foundation and Programming 2

- Object Oriented Programming

- Information Management Basics

- Enterprise Application Development

- Arena of Cloud Computing

- Development & Deployment of Apps on Cloud