



THE DEPARTMENT OF  
B.Voc (Software Development)  
AUTONOMOUS

(Estd. in 2015)

# Departmental Profile-Details of Faculty

Name of Faculty	Qualifications	Experience	Specialization	
	Mr. Wilson Rao Co-ordinator	M Sc IT	16 years	E-Commerce & Internet Security, Java Programming
	Ms. Anjali Sawant Assistant Professor	MCA	3 years	Android, Web technologies, DBMS, Green Computing
	Ms. Sunita Jena Assistant Professor	M Sc IT	11 years	Android Programming, Networking & .Net technologies, Cyber Law, Digital Electronics

# Departmental Profile-Details of Faculty

Name of Faculty	Qualifications	Experience	Specialization
 <p>Ms. Priti Shelar Assistant Professor</p>	M Sc IT	6 years	Applied Mathematics, Statistics, Business Intelligence, Linux Administration
 <p>Ms. Shruti Shah Assistant Professor</p>	M Sc IT	4 years	Computer Graphics, Programming, Data Structures and Algorithms
 <p>Ms. KrishnaChalitha KC Assistant Professor</p>	MSc-CS, B.Ed, PhD (pursuing)	3.5 years	Computer Networks, Artificial Intelligence, Python Programming, Linux Administration

# Departmental Profile-Details of Faculty

Name of Faculty	Qualifications	Experience	Specialization
 <p>Ms. Fatima Shaikh Assistant Professor</p>	M Sc IT	3.5 years	Maths, Java Programming, Android Programming
 <p>Ms. Bertilla Fernandes Assistant Professor</p>	MCA	8 years	.Net Technologies, Web Technologies, and Networking

# Departmental Profile- Details of Non-Teaching Staff

Name of the Staff	Designation	Qualifications	Overall Experience in years
Mr. Ratnakar Panhalkar	Lab Assistant	T.Y.Bsc	1 year
Mr. Sunil Uttekar	Lab Attendant	H.S.C	8.5 year
Mr. Sushant Chaudhari	Lab Attendant	T.Y.BMS	7 year
Mr. Sadashiv Khatkar	Lab Attendant	H.S.C	7 year
Mr. Sujit Sawant	Engineer (From A.B.Enterprise)	H.S.C	5 year

# Objective of B.Voc in Software Development

To provide vertical mobility to students coming out of 10+2 with vocational subjects

To integrate NSQF within the undergraduate level of higher education in order to enhance employability of the graduates and meet industry requirements.



To provide judicious mix of skills relating to a profession and appropriate content of General Education

To ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the program.

To provide flexibility to the students by means of pre-defined entry and multiple exit points

# B.VOC IN SOFTWARE DEVELOPMENT AS A SCHEME



# Course Benefits

- Recognized by UNIVERSITY GRANTS COMMISSION under National Skill Qualification Framework (NSQF, level 4-7) and recognized by University of Mumbai.
- In association with MNCs and expert trainers who will be actively involved in curriculum development and training of the students.
- Multiple exit points and Credit based grading system.
- Major emphasis on hands on training and industry internship as a part of curriculum.
- Certification by the National Skill Development Council, Govt. of India which will provide a pan-India recognition for the diploma.



# B.VOC in Software Development Curriculum Pattern

## SKILL COMPONENT

- It consistently enriches students through special certificate courses, workshops, and seminars to facilitate Employability.
- Adequate attention is given in curriculum design to practical work, on the job training, development of student portfolios and project work.

## GENERAL EDUCATION

- The general education component should adhere to the normal university standards. It should emphasise and offer courses which provide holistic development.
- Adequate emphasis should be given to language and communication skills

# B.VOC in Software Development Certification Levels

## DIPLOMA

DURATION	SKILL COMPONENT CREDITS	GENERAL EDUCATION CREDITS	SKILL COUNCIL NSQF LEVEL	NASSCOM NSFQ LEVELS	NASSCOM JOB ROLES
1 years	36	24	5	4	JUNIOR SOFTWARE DEVELOPER

## ADVANCE DIPLOMA

DURATION	SKILL COMPONENT CREDITS	GENERAL EDUCATION CREDITS	SKILL COUNCIL NSQF LEVEL	NASSCOM NSFQ LEVELS	NASSCOM JOB ROLES
2 years	36	24	6	5	WEB DEVELOPER. EST ENGINEER

## B.Voc DEGREE

DURATION	SKILL COMPONENT CREDITS	GENERAL EDUCATION CREDITS	SKILL COUNCIL NSQF LEVEL	NASSCOM NSFQ LEVELS	NASSCOM JOB ROLES
3 years	36	24	7	7	SOFTWARE DEVELOPER

# Aligned & Assessed for “JUNIOR SOFTWARE DEVELOPER”



IT - ITeS SSC  
NASSCOM




## QP-NOS Compliance Certificate

This is to certify that the  
curriculum of **Diploma in Software Development (B.Voc.)**  
designed by **JaiHind College**  
is compliant to the National Occupational Standards of “**Junior Software Developer**”  
Job role (QP No. SSC/Q0508, Version 1.0, NSQF Level 4)



Date of Issuance: September 28, 2017  
Valid with reference to SSC/Q0508, Version 1.0

  
Dr. Sandhya Chintala  
Executive Director,  
IT-ITeS Sector Skills Council NASSCOM  
Vice President, NASSEOM



IT - ITeS SSC  
NASSCOM

**GOLD**

## CERTIFICATE

This is to certify that  
**Miss Munira Billimoria D/O Iqbal Billimoria**  
has successfully cleared the assessment for the role of  
**Junior Software Developer (QP No. -SSC/Q0508)**  
conforming to National Skill Qualifications Framework Level 4



Date of Issuance: 27/12/2019  
Valid with reference

  
Pravin Rao  
(Chairman, IT-ITeS Sector Skill Council  
NASSCOM)

# B.Voc in Software Development Academic Structure

- This is a three year course based on Choice Based Credit and Grading System.
- This course has total six semesters, two semesters in each year.
- In every Semester each subject has **40 marks** internal (**Continuous Assessment**), **60 marks** external (**Semester End Examination** ), and **50 marks practical examination**.
- After the successful completion of a program, along with academic credit points student is also required to acquire **2 mandatory credits under AAA**. A student can also acquire **2 additional credits through non-mandatory AA** as well as **2 non-mandatory credits through an Internship** course during the course of the entire program.

# Bvoc(Software Development)- Syllabus

Semester I	Semester II
<b>General Component</b>	<b>General Component</b>
<ul style="list-style-type: none"><li>• Communication Skill, Meet and Greet &amp; Professional Etiquettes</li><li>• French Language, Culture, Historical Milestone and Local Etiquettes</li><li>• Office Automation</li></ul>	<ul style="list-style-type: none"><li>• Organizational Behavior</li><li>• Principles of Marketing</li><li>• Introduction to computer networks</li></ul>
<b>Skill Component</b>	<b>Skill Component</b>
<ul style="list-style-type: none"><li>• Web Designing &amp; Programming</li><li>• Logics and Algorithms</li><li>• Software Engineering</li><li>• Object Oriented Programming with C++</li></ul>	<ul style="list-style-type: none"><li>• Modern Operating Systems</li><li>• Computational Mathematics</li><li>• Core Java</li><li>• Database Management Systems</li></ul>

# Bvoc(Software Development)- Syllabus

Semester III	Semester IV
<b>General Component</b>	<b>General Component</b>
<ul style="list-style-type: none"><li>• Business Communication</li><li>• Digital Marketing &amp; Public Relations &amp; Advertising</li><li>• Green Computing</li></ul>	<ul style="list-style-type: none"><li>• Financial Literacy</li><li>• Principle of Management</li><li>• Human Resource Management</li></ul>
<b>Skill Component</b>	<b>Skill Component</b>
<ul style="list-style-type: none"><li>• Advanced Java</li><li>• Advance Web Designing &amp; Programming</li><li>• Data Communication and Networking</li><li>• Software Testing</li></ul>	<ul style="list-style-type: none"><li>• Android App Development</li><li>• C# and ASP.Net MVC</li><li>• Computer Security</li><li>• Advance SQL with Oracle</li></ul>

# Bvoc(Software Development)- Syllabus

Semester V	Semester VI
<b>General Component</b>	<b>General Component</b>
<ul style="list-style-type: none"><li>• Entrepreneurship-I</li><li>• Multimedia-I</li><li>• Managerial Economic</li></ul>	<ul style="list-style-type: none"><li>• Multimedia-II</li><li>• Reasoning Aptitude &amp; Placement Orientation</li><li>• Data Analytics</li></ul>
<b>Skill Component</b>	<b>Skill Component</b>
<ul style="list-style-type: none"><li>• Cyber-Forensics</li><li>• Python Programming</li><li>• Big Data</li><li>• Theory of Computation</li></ul>	<ul style="list-style-type: none"><li>• Artificial Intelligence</li><li>• Internet of Things</li><li>• Emerging Technology</li><li>• Optimization Technique</li></ul>

# Academic Evaluation

- ▶ **Continuous Assessment (CA) (40 marks):** There will be two Continuous Assessments conducted by department (CA-I and CA-II) for 40% of the total marks.
  - **CA-I:** Written or online test 20 marks.
  - **CA-II:** Internal course work of 20 marks is given by the respective departments. Course work may include Assignments / Seminars/ Oral Presentations/Study Visit Report / Survey / Mini Projects or any other method
- ▶ **Semester End Examination (SEE) (60 marks):** One Semester examination at the end of each Semester for 60% of the total marks of the said course
- ▶ **Practical Examination for Courses (PEC) (50 marks):** Marks for PEC in Science are 50 out of which 30 marks are for experiments (SEE) and 20 marks for internal practical assessment.



# SEMESTER THEORY EXAM

## (General Education & Skill Component)

INTERNAL ASSESSMENT	EXTERNAL ASSESSMENT	TOTAL MARKS
Internal Test	Theory Exam	
40	60	100

## SEMESTER PRACTICAL EXAM (Skill Component)

INTERNAL PRACTICAL ASSESSMENT	EXTERNAL PRACTICAL ASSESSMENT	JOURNAL	VIVA	TOTAL MARKS
20	20	05	05	50

# Additional Academic Activity (AAA)

- ▶ Each student has to complete **minimum of 60 hours** of AAA activities **over** the **3-year** of UG studies and obtain **two credits**. Student can earn these credits according to his/her convenience but it is advisable for students to earn by doing **20 hours in FY, 30 hours in SY and 10 hours in TY**.
- ▶ AAA courses are more of a co-curricular nature to equip the student towards learning beyond the curriculum
- ▶ **Activities in the year 2019-20**
- Latest trends in **Android Application Development** by Mr. Niket Shah (Android Developer) at Sanda Group of Management Services pvt Ltd.
- Hands on workshop on **IOT with Arduino** by Professor Mr. Manoj Kavedia from Thadomal Shahani Engineering College

# Additional Academic Activity (AAA)

- Guest lecture on **Advanced Web Technologies** used in Industries by Mr. Vaibhav Palve from Directi
- Special Lecture on **Big Data** by Mrs Sonali Gupte, Lecturer as an IEEE Member, Industry Expertise in Business Analysis
- Guest lecture on **Machine Learning** by Mr. Avin Mehta, Technical Architect from Accelya
- **Avishkar**- Inter College Science Exhibition Organized by Mumbai University
- **Xplore**- Intra Collegiate Science Exhibition Organized by JaiHind College

# Additional Academic Activity (AAA)

## ➤ **Departmental Discussion Club**

- ▶ The main objective of this Discussion Club is to inculcate research oriented activities among students, preparing research papers and getting trained for paper presentation.
- ▶ **Paper Presented by Students in various Research meet:**
  - **1 BVoc SD Student** presented paper in the Conference on “Emerging Innovations in Information Technology: Prospects & Challenges”, SM Shetty College of Science, Commerce & Management Studies, Mumbai. Name of the Book & publisher / Journal, Issue: International Journal Of Advance And Innovative Research(IJAIR).
  - **1 BVoc SD Student** presented paper in National Conference on “Advanced Research in Computer Science and Information Technology” , organized By Mulund College of Commerce, Mumbai, Name of the Book & publisher / Journal, Issue: Paper accepted in Springer Publishing



**Avishkar**



**Xplore**



**Research Meet**



**Special lecture on Android**



**Hands on IOT Workshop**



**Guest lecture on Advanced Web Technologies**



**Guest Lecture on Machine Learning**



**Research Meet**



**Special lecture on Big Data**

# Additional Activity (AA)

- ▶ A student can also acquire 2 additional credits through non-mandatory AA or 'Additional Activity.
- ▶ The AA courses are more of an **extra-curricular** nature involving Extension activities, CSR activities etc. so as to sensitize the student towards his responsibility towards the society, and thereby to the nation as a whole.
- ▶ **Activities in the year 2019-20**
- ▶ To have first-hand experience, Experiential learning is done through Industrial visit to Data Center NetMagic for understanding Networking and Data Centre Technologies .



## Industrial Visit to Data Center NetMagic



# Avenues after Bvoc (Software Development)

- ▶ The Department always strive to enhance and upgrade the syllabus, trending as per industry perspectives with latest Technology
- ▶ **Professional avenues open to successful graduates are:**
  - ❖ **Software Developer:** Implementing software solutions by building programs, applications through various programming language.
  - ❖ **Software Tester:** They write and test codes, often using development tools with the help of Software Engineering and Software Testing
  - ❖ **Web Developer:** Creating and designing layout of websites.
  - ❖ **Network Administrator:** Responsible for devising security, data storage, and disaster recovery strategies



# Avenues after Bvoc (Software Development)

- ❖ **Database Administrator:** Installation, configuration, database design, monitoring, security, troubleshooting, backup and data recovery.
- ❖ **System Analyst:** Examining existing IT systems and write the requirement for new ones for the client or employer.
- ❖ **IT Consultant:** They provide technical assistance in developing and implementing IT systems
- ❖ **Data Analyst:** overseeing practices and processes to ensure integrity, safety, and availability of all data and applications as part of the organization's information system
- ❖ **Support Engineer:** Providing technical set-up, advice, and support to IT users
- ❖ **Automation Industry:** Use of control systems, such as computers or robots, and information technologies for handling different processes and machineries in an industry to replace a human being

# Venues after BVoc (Software Development)

After having done BVoc (Software Development) students have many options to build their career.

- **IT Professional Job** (Software Developer, Network Administrator, Business Analyst, IT Consultant and many more)
- **Higher Studies**
  - **Post Graduation** (Master In Computer Application, MSc IT, MSc Computer Science)
  - **Management Studies** (MMS/MBA)
  - **Studies abroad** for MS or MBA
- **Certification Courses**
- **Appearing for Public Sector Exams like U.P.S.C., M.P.S.C., SBI-PO, etc**

# Infrastructure



Well equipped computer labs with upgraded and latest versions of software.

A Computer Lab sponsored by Hewlett-Packard for improved learning.



# Infrastructure



Lab with 60 latest OS implemented machines and licenced software

Mounted projectors and audio devices in the Classrooms and Computer Labs.

Implementation of Smart Board

Interactive system to engage students in active collaborations.



# Placements & Internships

Infosys



- **Placements in the year 2019-20**



5 Students got selected with a  
Package of 1.93 LPA

- **Internship in the year 2019-20:** List of students currently doing internship in the following companies:

- Shbangg- Zahan Ghadiali
- Future Tech Partner- Kalpesh Kandelwal
- ITS- Aziz Kanorwala
- COIPL- Tasneem Pipalyawala
- Sohmna- Rukaiya Sabuwala
- Blip- Navid Gowani
- Kristsnam Technologies pvt ltd- Arjun Verma

# Departmental Activities

- ▶ To Create cyber awareness among students a Seminar was conducted on “**Cyber Security**” from Marine Drive Police Station.
- ▶ Every year Department conducts an Orientation programme for First year students to explore them about Bvoc (Software Development) course.
- ▶ JaiHind College witnessed its biggest E-Waste event of **4 days** by collecting **450Kgs of E-waste**.
- ▶ Two days Inter Collegiate Technical Fest “**Cyber Strike**” was organized by the Computer Society “**DOT COM CLUB**” which had various technical events like technical clue hunt, crack the code, quiz, gaming events, Fashion show and many more.
- ▶ Apart from all this, Department also had other fun activities for students like football tournament, Celebration of Christmas Party , Traditional day and Farewell for Tys.



**FY Orientation**



**Seminar on Cyber Crime**



**Traditional Day**



**TY Farewell**



**Football tournament**



**CyberStrike**



**E-Waste drive**



**Thank You**