

Skilling, Upskilling and Re-skilling India



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Skills for the Future

50-60% of Jobs would require New Skills

Service Big Data Delivery IoT **Analytics Automation** AI/ML/Natural **Robotics** Language AR/VR

Source: NASSCOM (2017)

Important Qualifications & Skills of the Future



1. Knowledge about ICT

- > Basic Information Technology knowledge
- > Ability to use and interact with computers and smart machines like robots, tablets etc.
- Understanding machine to machine communication, IT security & data protection



2. Ability to work with data

- > Ability to process and analyze data and information obtained from machines
- > Understanding visual data output & making decisions
- > Basic statistical knowledge



3. Technical know-how

- Inter-disciplinary & generic knowledge about technology
- Specialized knowledge about manufacturing activities and processes in place
- > Technical know-how of machines to carry out maintenance related activities



4. Personal Skills

- > Adaptability & ability to change
- > Decision making
- > Working in team
- > Communication skills
- > Mindset change for lifelong learning

More Focus	Less Focus
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Skill Related Challenges faced by Companies

Up-skilling

- Companies required to upskill their workforce
- For example, an assembly line worker involved in manually fitting a part will be required to operate a robot or other tools to do so.

Re-skilling

- Technology
 expected to
 result in job
 displacement as
 number of jobs
 will cease to
 exist & number
 of new jobs will
 be created.
- Investment in re-skilling required to prepare for this expected shift.

Continuous Learning

- Technologies will become obsolete at a faster rate.
- Continuous professional development strategies required to adapt to the changes that technological advancement brings.

Mindset Change

 Mindset change required of employees to facilitate smooth transition to advanced manufacturing processes.

Current Scenario

- Average rate of employability of Indian students is less than 5% (Economic Times)
- Less than 20% of graduates find jobs
- Only 3% of total students in upper secondary opt for skill/vocational education

Comparative with South Korea

- 98% of students are vocationally trained & certified
- 80% of students passing out of polytechnics find jobs
- Special Law to incentivise students & industry to promote skill education & hiring of vocationally certified resources
- Comprehensive VET system

Issues with Present Skill Development Sector

Integration of NSQF in Secondary, Higher Secondary & Higher Education required

Equivalency

Lack of Vertical Mobility for students in HEIs

No policy for RPL for students from informal sector

Eligibility norms not formulated for vocational students

Teacher Training & Qualification

Lack of Guidelines for hiring of teachers for Vocational education

No formal mandate for Teacher Training

Poor industry linkages for inservice training for Teachers

Higher Education

No Separate Guidelines for Skill universities

No system for Credit transfer & banking

UGC 22 list does not recognize sector specific degrees such as Bachelors in Logistics etc.

Re-imagining Skill Development Sector

Characteristics of a good VET System

Characteristics

of a good VET

System



> Providing access to up-to-date curriculum which is in-line with the industry's skill requirement



Practical Training

> Providing opportunities for students to learn & practice in industry setting through apprenticeships or dual training system



Infrastructure

> Creating holistic learning environment by providing access to state-of-art industrial machinery, equipment & tools



Standards & Qualification

 Providing widely recognized standards & qualifications (NQF), which also allows students to change education tracks



Quality of trainers

> Availability of sufficient numbers of qualified trainers who have industry experience & knowledge about latest industrial practices



Positive Image

 Creating a positive image of vocational education such that young people find it attractive as a career opportunity

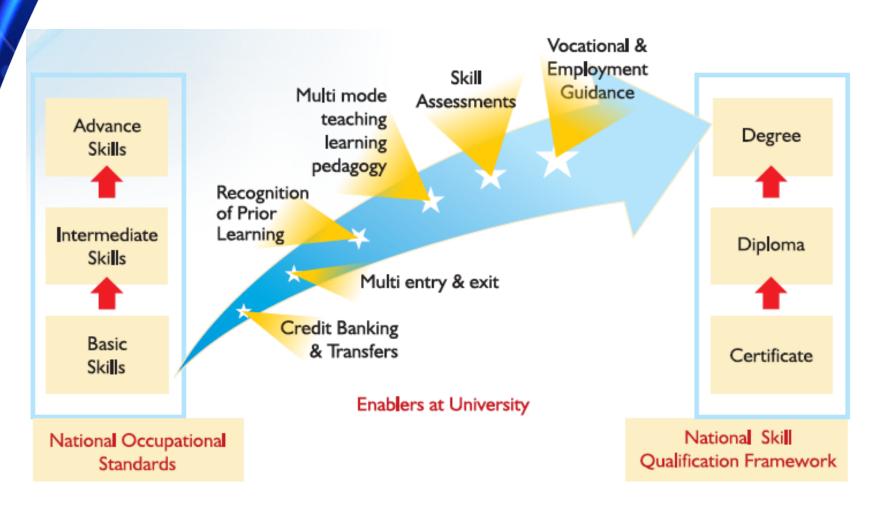
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Skill Development University Model





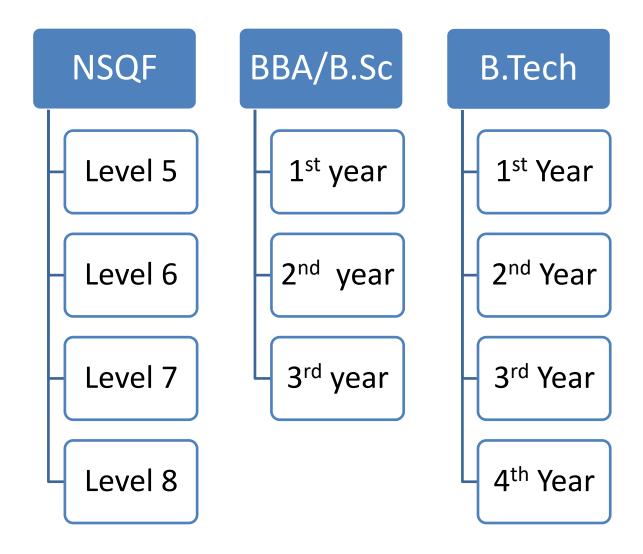
Salient Features

- 1. FIRST Skill Development Universities of the Country
- Sector Focused Programs
- 3. Integration of **Future Skills** in all university programs
- 4. Skill Centers and Learning Factories on campus
- 5. Close Industry Collaboration
- 6. Work integrated Programs with yearly internships
- Competency based Teaching Learning Pedagogy and Skill Assessment
- 8. 70% teaching through **Experiential Learning**
- 9. Short term Certification & Vertical Mobility
- 10. Industry Experienced Faculty

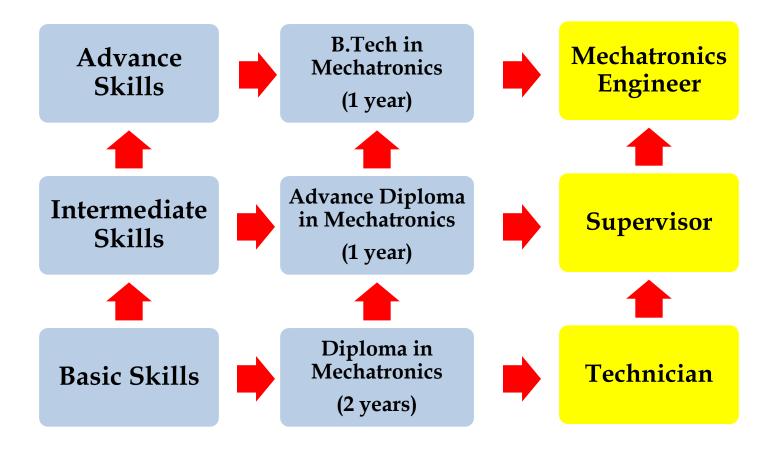
Skill Based Degree Programs aligned to High Growth Sectors

Sector	Industry Partner	Programs	CoE /Labs / Workshops / Projects
Automobile	SKFVolvo EicherMAN TrucksJohn Deere	B.Tech in Automobile Engineering	 Auto Workshop with latest machinery Specialized Auto Electronics Labs imported from Germany
Construction	Larsen & ToubroDaikin India	B.Tech in Construction Engineering	Construction YardDaikin HVAC CoE
Mechatronics	ZF GroupMAHLEWürth	B.Tech in Mechatronics	 Specialized Lucas Nuelle Labs from Germany
Retail Management	Future GroupShopper's Stop	BBA in Retail Management	Shopper's Stop on Campus
Beauty & Wellness	Enrich SalonsBeauty & WellnessSector Skill Council	B.Sc in Beauty & Wellness	Enrich Salon & Training Academy

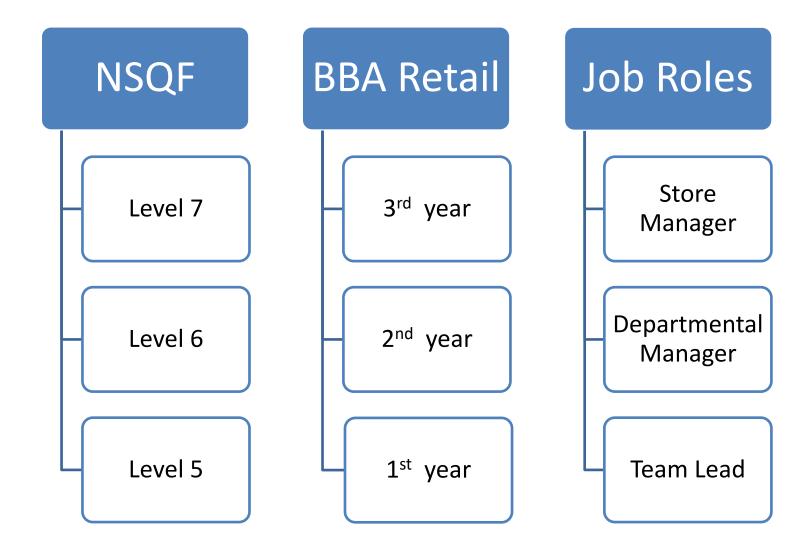
Mapping to NSQF Levels



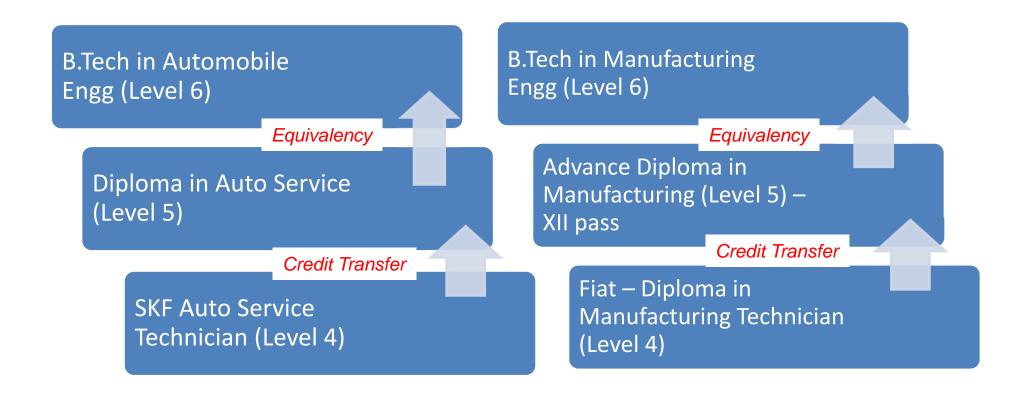
B.Tech Mechatronics



BBA Retail



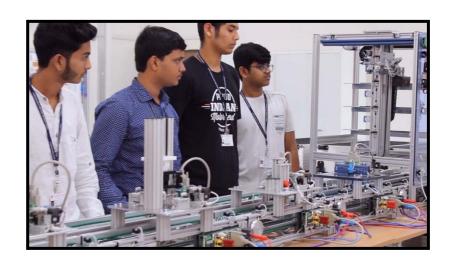
Examples of Industry Sponsored-Skill Training Programs



Automobile & Mechatronics Specialized Training Labs with German Equipments







Example of Experiential Learning



Conceptual Understanding Skill Training Kits



Practical Application Simulation Kits



Real Life Experience

Learning Factories on Campus



Simulated Bank & Finance Plaza



Beauty & Wellness Lab



Retail Lab



Construction Yard

Infrastructure @ Indore



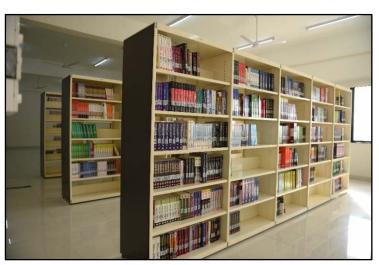
Management Block



Auditorium



Engineering Block



Library

Infrastructure @ Pune



Auditorium



Library



Academic Block



Girls & Boys Hostel





THANK YOU...



Contact Details



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