



Memorandum of Understanding Between

Visvesvaraya Technological University (VTU)

And

Friends Union for Energising Lives (FUEL)



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Government of Karnataka

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Memorandum of Understanding

This Memorandum of Understanding is executed at Belagavi on this 201 day of ... 2019, between **Visvesvaraya Technological University** "Jnana Sangama" Belagavi represented by Incharge Registrar Dr. Satish Annigeri hereinafter referred to as the "First Party" (Which expression shall where the context requires or admits mean and include its successors, legal representatives, administrators and assigns)

AND

Page 1 of 6
REGISTRAR
Visvesvaraya Technological University
BELAGAVI.

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- 2. The onus of checking for 3 mass 30 he users of the certificate 3. In case of any discrepant latter on the Competent Authority.

Friends Union for Energizing Lives (FUEL), a non-profit organization registered under The Bombay Public Trusts Act, 1950 working in the space of Career counselling, Skill Development & Scholarship Implementation having its registered office at I1-1102, Amrut Ganga Complex, Manikbaug, Sinhagad Road, Pune – 411051 hereinafter referred to as "FUEL" Herein after referred as the "Second Party" (Which expression shall where the context requires or admits mean and include his successors, legal representatives, administrators and assigns).

WHEREAS the First Party is the technological university established by the Government of Karnataka in Belagavi and it is having affiliation of 217 engineering colleges, Post Graduation Centers and National Academy for Skill Development (VTU-NASD) in Karnataka.

WHEREAS the Second Party is a non-profit organization working in the space of Career counselling, Skill Development & Scholarship Implementation and also implements Corporate Social Responsibility projects across India. Second party has shown interest to implement training programmes at VTU-NASD campus.

AND WHEREAS the First Party is the absolute owner of the premises of VTU-NASD, Dandeli where the facilities to conduct skill based training have been arranged.

AND WHEREAS the Second Party is a non-profit organization working in the space of Career counselling, Skill Development & Scholarship Implementation which has agreed to provide training on Future skills And its Related soft skills i.e.

- 1. Digital Marketing
- 2. Artificial Intelligence
- 3. IOT/Big Data
- 4. Machine Learning
- 5. Block Chain
- 6. 3D Printing

Other trades having good market demand may be considered Course curriculum & duration are appended at **Annexure-I**.

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REGISTA OF 6 Visvesvaraya Technological University BELAGAVI. Front Line Skills and its related soft skills i.e.

1. BFSI

FDO (Front Desk Officer)

BCBF (Business Correspondent Business Facilitator)

2. Retail

RSA (Retail Sales Associate)

RTA (Retail Trainee Associate)

3. IT/ITES

Customer Relationship Management

Domestic Data Entry Operator

4. TELECOM

CCE (Customer Care Executive)

Other trades having good market demand may be considered

Course Curriculum & Duration compliance to Qualification Pack-National Occupational Standards set by National Skill Development Council.

The above said activities shall be conducted in the premises of VTU-NASD, Dandeli for Students of 9th to 12th, Graduates/ Undergraduates/ Dropouts.

The First Party has agreed to provide schedule premises to Second Party under certain terms and conditions as enumerated below.

In pursuance of the above this MoU has been executed with the following terms and conditions.

NOW THIS MOU IS WITNESSETH AS UNDER:

- 1. The First Party is having a scheme of skill development under the guidance of ministry of skill development, Government of India. The First Party is providing the following facilities to the Second Party.
 - a) Class Rooms with LCD projector for Training.
 - b) Computer Laboratory
 - c) Internet connection
 - d) Power supply with UPS Back-up
 - e) Lodging and boarding facility for required students on chargeable basis.
 - f) Advertisement and public notice for admission with financial assistance from Second Party.

REGISTRAR Varaya Technological Unio BELAGAVI.

- 2. The Second Party shall arrange the following facilities to the First Party:
 - a) The second party shall provide overall training, Faculty Remuneration, Materials associated, Softwares required for the training.

The second party shall provide Facilitators who are competent to impart the training. The training will be conducted by professionals and lab will be supported by FUEL Learning Enablers. The unique feature of the programmes is building the theoretical base, hands-on technical skills along with behavioural skills all of which are critical in building a career.

The First party shall not be responsible for the behaviour, conduct or any misdeeds of the facilitators and any other staff of the second party. Further neither students nor stakeholders of FUEL shall not claim or file a suit and anything including monetary benefits from the first party.

- 3. The participants who are enrolling in the programme shall have the following prerequisites:
 - a) Suggested Audience are Students of 9th to 12th, Graduates/ Undergraduates/ Dropouts.
- 4. Hardware and Software Resources.
 - a) The first party shall provide required computer systems to students to conduct the course.
 - b) That second party shall provide necessary software's and materials associated with training.
 - c) Number of Participants

 That maximum number of 25 participants shall make the each program effective.
- 5. The second party shall also have the following Responsibilities
 - a) Selection of Trainees [written test and Interview]
 - b) Creating, conducting and evaluating online quizzes.
 - c) Conducting classroom and practical session at the College campus.
 - d) Intermediate and Final Assessment
 - e) Placement assistance

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6. Certification;

The first party shall issue a certificate to all participants who complete the course successfully.

- 7. The first party shall collect fees from each student for providing the training on the course and issuing the course completion certificate. The course fees are as under:
 - a) Rs.4,000/-(Rupees Four thousand only) per student who has registered for Future skills and its related soft skills.
 - b) Rs.3,000/-(Rupees Three thousand only) per student who has registered for Front Line Skills and its related soft skills.

That out of the above fees collected, the first party shall pay to second arty:

- a) Rs.2,000/- (Rupees Two thousand only) for each student who has registered for Future skills and its Related soft skills.
- b) Rs.1,000/- (Rupees One thousand only) for each student who has registered for Front line skills and its related soft skills.

7.1 Payment Terms;

- a) That First party shall pay the above said amount of Rs.2,000/- (Rupees Two thousand only) and Rs.1,000/- (Rupees One thousand only) to second party after deduction of all applicable charges and Taxes (if applicable).
- b) Payment to be made via direct electronic transfer as per below details.
- c) Online bank transfer/cheque issue can be done in the name of "Friends Union for Energising Lives" Account No.:0641104000084251, Bank Name: IDBI Bank, Anand Nagar, Pune. IFSC code: IBKL0000641.
- d) This MoU is valid for a period of 12 months from the date of signing.
- e) This MoU may be renewed for further period of 12 months with the terms and condition to be agreed thereon for the purpose of the conducting the program.
- f) This MoU can be extended to other centers of VTU based on the performance of second party at VTU-NASD, Dandeli.
- g) Nothing in the MoU is intended to, or shall be deemed to, any partnership or joint venture between the parties and authorized any party to make or enter into any commitments for or on behalf of any other party.

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8. Dispute;

If any dispute is not settled amicably within one month's written reference to the Vice Chancellor, VTU the same shall be resolved through the process of arbitration as per the provisions of the arbitration and conciliation act 1996. In such case one Arbitrator shall be appointed by First Party and other arbitrator appointed by the second party. The two arbitrators may appoint a third arbitrator. The jurisdiction would be at Belagavi. The venue of arbitration shall be VTU campus, Jnana Sangama, Belagavi. The award given by the arbitrator shall be final and binding on both the parties.

This MoU is in two original copies and the respective parties shall retain one of them.

IN WITNESS WHEREOF the parties have subscribed their respective signatures on this agreement on the day and the day herein above mentioned.

WITNESSES:

The Registrar, VTU, Belagavi
(First Party)

Visvesvaraya Technological Universi BELAGAVI.

FUEL represented by

Founder & CEO Mr.Ketan Deshpande

(Second Party)



ANNEXURE-1

Syllabus for Future Skills Programmes

Duration: 240 hours

Digital Marketing

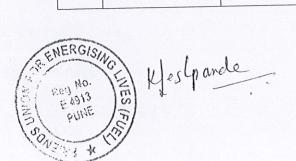
SI. No	Topic	Description	Objective
1	Introduction to Digital Marketing	 What is marketing? What is Digital Marketing? Importance of Digital Marketing and Job Opportunities Why Digital Marketing wins over traditional Marketing? Understanding Digital Marketing Process Digital Marketing Terminology 	To Understand The basics of Digital marketing The process of digital marketing is consumer journey Why should one study digital marketing Job Opportunities
2	Website Planning & Creation	 Understanding Internet & web Understanding websites Understanding domain names & domain extensio What is web server & web hosting Planning & Conceptualizing a Website Building website using word press in Class 	To Understand Different Types of websites based on functionality and purpose How to Build and Host your website Different tools used to build a great website How to analyze the website for usability performance

Page **1** of **7**

Emiz

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3	Email Marketing	 What is email Marketing? How email works? Challenges faced in send bulk emails and how to overcome these challenges? Types of email marketing- Opt-in & bulk emailing Setting up email marketing account Best platforms to do opt-in email marketing Setting up lists & web form & broadcast email What are auto responders? Best practices to send bulk emails Top email marketing software's & a glimpse of how to use them 	To Understand What is Email Marketing How to Gather Emails of Customers through website and social media platforms How to Design a better Email for high Conversion rate How to analyze email marketing campaigns Best practices to send bulk emails
4	Lead Generation For Business	 Understanding lead generation for business Landing page vs. website Understanding landing pages and design Understanding thank-you page and design Understanding lead funnel and Converting leads into sales 	To Understand The lead generation Process How to design your website landing pages for getting leads Design a Lead Funnel based on the business type





Page 2 of 7

5	Search Engine
	Optimization

- What is SEO?
- Introduction to SERP and Search Engine mechanism
- Keywords?
 Different types of keywords and
- Google keyword planner tool for keyword research
- Website
 Optimization for
 SEO using
- Titles, Meta Tags, Content Keywords, Internal Linking, Sitemap, Link building, Local SEO
- Webmasters tool and website verification
- Tools for SEO

To Understand

- How Google Search Engine Works
- Importance of SEO
- How to Optimize website for SEO
- How to Build Links and references
- Local SEO
- Usage of Webmasters tools

Internet of Things (IoT)

Topics

Introduction to Internet of Things

- Concept and definitions
 - Embedded Systems, Computer Networks, M2M (Machine to Machine Communication), Internet of Everything (IoE), Industrial Automation
- IoT Adoption
 - o Market statistics, Early adopters, Roadmap
- Business opportunities: Product + Service model
 - Development, deployment and monetization of applications as service
- Introduction to Basic Electronics and Embedded System.
- Introduction to PCB design.
- Introduction to Arduino Programming Environment.
- Introduction to IoT and cloud communication.
- Software Installation.

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Page 3 of 7



Embedded System Design

- Embedded Product design flow Theory
- Basic Electronics and Components Identification Theory.
- Sample Electronics circuits and its design Theory.
- Understanding Basic C Theory.
- Introduction to Embedded C Theory.

Introduction to Atmega328 and ESP8266 (node MCU).

Introduction GPIO Programming for Atmega328 (Arduino UNO).

Interfacing:

- LED Interfacing with Atmega328.
- Buzzer Interfacing with Atmega328.
- ON/OFF LED/Buzzer with a Switch.
- Interface Single contact Relay.
- Interface LCD to Atmega328.
- Interface ULTRASONIC with Atmega328.
- ADC Function test with potentiometer.
- ADC Function test with temperature sensor.
- ADC Function test with GAS sensor.
- Motor driver interface with Atmega328.
- · Serial communication test.

esparde

RFID interface with Atmega328.

Introduction to Thing speak

- · Account activation on Thing speak.
- Project registration with selected field parameters.
- Data upload to Things Speak cloud using ESP8266 with ATMEGA328.

Raspberry pi

Introduction, Background, Raspberry Pi system specifications, Ports, Pins and their uses, Raspberry Pi with Raspbian OS & Different Operating Systems, Setting Up Raspbian OS, Configuring your Raspbian, GUI - Lightweight X11 Desktop Environment" or in short LXDE, Installing Software, Uninstalling Software, Upgrading Software.

Raspberry pi

Programming on Raspberry Pi, VNC Server, SSH, Working with Sensors like PIR, Ultrasonic, Gas sensor.

Page 4 of 7

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Tools for Developers (Combined with AI)

Github

- An Introduction to Git
- Getting Started with GitHub
- Working with Repositories in GitHub
- · Branching, Merging, and Pull Requests in GitHub
- Creating Tags and Releases
- Managing Your Project through GitHub
- Working with Organizations and Teams
- Interacting with GitHub through the GitHub Desktop Client

Code Editors: Visual Studio Code, Sublime Text, Atom, Notepad++

Artificial intelligence & ML

Introduction: Artificial intelligence; Machine learning; Natural language processing; Speech recognition; Computer vision; Robotics

Introduction to ML: Introduction to machine learning – Different types of learning - Linear regression – Logistic regression – multi-class classification – performance metrics – scikit-learn package – first machine learning application

Supervised Algorithms: Decision Trees – CART algorithm – Random Decision Forest – Gradient Boosted Trees – K-Nearest neighbor - Multilayer perceptron – Support vector machines - Bias- Variance trade-off - error analysis - Model selection - Feature selection

Unsupervised Algorithms and Dimensionality Reduction: Clustering - k-means clustering - hierarchical clustering - dimensionality reduction - Principal component analysis - Auto-encoders

Introduction to Deep Learning: Unsupervised feature learning – Convolution Autoencoder – Convolution Neural Network – Recurrent Neural Network – ML+DL pipeline – State of art deep networks

Practical applications of ML and DL: Image segmentation – Image classification – Language modeling – Sentiment classification – Speaker recognition – Recommendation systems - Practical constraints of ML and DL

Tensor flow - Introduction, Computation Graph, Working with Images

Page 5 of 7

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Machine Learning on Cloud:

Azure Machine Learning Studio Microsoft Cognitive Services

Case Study:

Handwritten Digits Recognition

Running Open Source Tensor flow Applications in Android

Building Classification Models to Detect Dogs & Deploying in Android

Blockchain

Overview Of Blockchain Technology: What is blockchain, Transactions, Blocks, Hashes Consensus, Verify and confirm blocks

Blockchain Applications: Government applications, Identity management, Auto executing contracts, Three signature escrow, Triple entry accounting, Elections and voting, Identity management, Property records titles, Micropayments, Notary

Smart Contracts And Ethereum: Technical introduction to smart contracts, Ethereum overview, Web3 proposition for a decentralized internet, Using Ethereum sub-protocols, storage and ways of interacting with the external world

Final Project: Create an ERC–20 token, Design a Distributed Application (DAPP), Deploy a Decentralized Storage DAPP on private Ethereum blockchain.

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Page 6 of 7

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3D Printing

Topics

Introduction to 3D Printing

- > Concept and definitions
 - > History of 3D printing
 - > Types of 3D printing technologies
 - > Types of 3D printers and explain their functioning
 - > Types of materials used for 3D printing. Demo and samples for FDM printing will be shown
 - > Applications of 3D printing in industry and research area
- > How 3D printing can be implemented in engineering.

Hardware

- > 3D printer parts (FDM technology) will be explained and demo will be given on how to assemble and disassemble printer.
- > Troubleshooting hardware issues will be explained
- How to upgrade printers
- > Demo on DLP printer and its working will be given
- Introduction to R&D happening in 3D printing hardware

Software

- > Basics of designing software like Fusion 360 will be taught
- > Detailed explanation on how to create G-Code, different features and functionalities of software will be explained
- Different settings based on materials used will be explained.
- Demo on bad G-Code will begiven

3D printing

- ▶ Hands-on designing, creating G-Code and 3D printing
- ▶ Understanding issues encountered in 3D printing and how to correct them.

Post Processing

- > Techniques of post processing will be taught
- > Hands-on to try different techniques to match industry standards.

Practice Time

> Students will be divided into batches, where they design and print one design pertaining to their interest or real life example from industry

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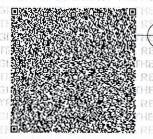
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- AGREEMENT
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- : THE CEO EKLAKSHYA ACADEMY HUBLI
- : THE REGISTRAR VTU BELAGAVI
- : 500

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Authorised Signature

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Please write or type below this line

AGREEMENT

This Agreement is executed at Belagavi on this 5...day of October 2018 BETWEEN Visvesvaraya Technological University 'Jnana Sangama", Belagavi represented by Registrar Dr. H N Jagannatha Reddy, Hereinafter referred to as the "First Party" (Which expression shall where the context requires or admits mean and include its successors, legal representatives, administrators and assigns)

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For EKLAKSHYA ACADEMY LLP

AND

Page 1 of 7

Registrar, VTU, Belagav

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- 1. The authenticity of this Stamp Certificate should be verified at "www.shcilestamp.com". Any discrepancy in the details on this Certificate and as available on the website renders it invalid.
- The onus of checking the legitimacy is on the users of the certificate.In case of any discrepancy please inform the Competent Authority.

ekLakshya Academy represented by its Founder & CEO Ms. Poornima Mohanachandran Add: C-Lite Building, BVB Campus, Vidyanagar, Hubli-580031, Karnataka. Herein after referred as the "Second Party" (Which expression shall where the context requires or admits mean and include his successors, legal representatives, administrators and assigns).

WHEREAS the First Party is the technological university established by the Government of Karnataka in Belagavi and it is having affiliation of the 210 engineering colleges, Post Graduation Centres and National Academy for Skill Development (VTU-NASD) in Karnataka.

AND WHEREAS the Second Party is the EkLakshya Academy LLP is a premier education and training company engaged in education and training programs in the domains of VLSI Design, Embedded Systems and Software Engineering for Corporates as well as for educational institutions.

AND WHEREAS the First Party is the absolute owner of the premises of VTU-NASD, Dandeli where the facilities to conduct internet of things (IoT) training "Sensor to Cloud" have been arranged in the above referred premises.

AND WHEREAS the Second Party is the premier education and training company which has agreed to provide IoT training "Sensor to Cloud" in the premises of VTU-NASD, Dandeli for BSc/BCA/Diploma and B.E/B.Tech students of CSE, ISE, ECE and EEE background. Students of other branches (Mechanical, Civil) can also attend provided they meet the pre requisites as mentioned in section 3.a)

The First Party has agreed to provide schedule premises to Second Party under certain terms and conditions as enumerated below.

In pursuance of the above this agreement has been executed with the following terms and conditions.

NOW THIS AGREEMENT IS WITNESSETH AS UNDER:

- 1. The First Party is having a scheme of skill development under the guidance of ministry of skill development, Government of India. The First Party is providing the following facilities to the Second Party.
 - a) Class Rooms with Wi-Fi connectivity and LCD projector for Training.
 - b) Computer Laboratory consisting of desktop with Windows XP/Windows 7/Windows 8/Windows 10
 - c) Software infrastructure
 - d) Internet connection
 - e) Power supply with UPS Back-up
 - f) Lodging and boarding facility for required students
 - g) Advertisement and public notice for admission
 - h) Collection of Training fees from the students and handover to Second Party as mentioned in clause no: 7.

For EKLAKSHYA ACADEMY LLP

Page 2 of 7

Registrar, VTU, Belagavi

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- 2. The Second Party shall arrange the following facilities to the First Party:
 - a) The second party shall provide a summary of the overall scope and pricing associated with delivery of Internet of Things training program titled "Sensor to Cloud".
 - b) Development Kit for conducting the course.
 - c) The training program shall consist of the following four parts.

1.1 Pre-classroom Preparation

Participants are required to have desktops or laptops with necessary setups and these are listed in Section 4 Hardware/Software resources. This will also have the participants go through pre training assessment which will be done online. These steps are to ensure the classroom session is leveraged well.

1.2 Classroom Sessions [12 weeks]

Here, participants will get introduction to NodeMCU, a prototyping platform with exposure to key aspects of NodeMCU hardware and software. Details on Basic electrical components, NodeMCU Hardware and software, sensors, actuators and overview of IoT Cloud platforms along with creating an IoT device that pushes data to IoT cloud will be covered. There will be minimal theory sessions and extensive hands-on lab sessions to reinforce the learning. At the end of the this classroom, participants must get comfortable with NodeMCU programming environment, related hardware/software, IoT cloud platforms and be able to create simple IoT Devices. ekLakshya intends to make the classroom session as hands-on as possible so that the participants learn by doing rather than learn by listening.

During the session, several exercises will be provided to make the participants comfortable with hardware and software tools and technologies. The expectation from the participants is to be highly interactive and engaging. There will be brainstorming sessions, quizzes and exercises to make the workshop interesting.

1.3 Post-classroom projects

The effectiveness of training significantly improves when the participants continue the learning after the workshop session. To ensure that the participants reinforce their learning after the classroom session, participants will be guided on projects that will be executed individually or as a group. Technical help will be provided for the execution of these projects. The duration of this part is expected to take about 12 weeks.

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Page 3 of 7

Registrar, VTU, Belagav

DESIGNATED PARTNER

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One of the facilitators will visit the VTU-NASD, Dandeli campus to review the project activities. A review of 20 projects can be done per day. In addition to projects, monthly online quizzes [3 quizzes] on topics taught in the classroom will be conducted. At the end of the three-part training program, it is expected that the participants will be fairly comfortable in creating IoT Device proof-of-concepts and get ready for the prototype development. They will be familiar with NodeMCU platforms, key sensors and chosen cloud platforms.

1.4. Communication Skills and soft skill sessions

The training would include 7 hours per week dedicated to communication skills and soft skill development. These sessions would cover Communication skills, Business email etiquette, Psychology of the winner, Time Management, Emotional Quotient, Creative & Critical Thinking and Presentation skills and individual coaching sessions as needed.

1.5. Classroom Session Outline.

The following is the proposed outline of the classroom.

Topic	Details	Schedule
C Programming	Problem Solving and Algorithm	8-11-11-11-11-11-11-11-11-11-11-11-11-11
[Revision]	Writing(PSAW)Flow Charts, History of 'C'	
	programming language Introduction to C	
	Programming Language, Advantages of 'C',	
	Constants and Variables, I/P and O/P	
	Operation, Data Types, Operators and	5
	Expressions, Control Statements Loop Control	
	Structures, Arrays, Strings Functions,	
	Structures and Unions, Pointers, Linked Lists	
Introduction to	Identifiers ,variables and assignments	
Python	Receiving inputs Importing modules	9
Programming	Data Types Operators Strings Lists	
	Tuples Dictionary Decision making and Loops	
	Functions Class	
Introduction to IoT	IoT Ecosystem. IoT Devices, Communication	PAGE .
Architecture	hardware and software,. Cloud platforms. IoT	
	Product examples, Session Quiz	
Introduction to	NodeMCU Basics. Hardware and software	all vo
NodeMCU	features. Pin Outs	
Digital Pins	Getting comfortable with NodeMCU digital	
	Pins. LED blinking programs. Multiple LED	
	blinking.	

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Page 4 of 7

Registrar, VTU, Belagav

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FOR EKLAKSHYA ACADEMY LLP

Sensor Refresher Sensors	Basics of sensors Types of sensors, Sensor Characteristics. Sensor theory Overview of sensors, their types and applications. Sensor theory. Sensor characteristics. Examples of basic sensors such as temperature and light sensors. IoT products examples using sensors, Interfacing basic sensors with NodeMCU. Session Quiz	
Sensor Interfacing with NodeMCU Circuit development	Connecting sensors to NodeMCU environment. Reading values from sensors and displaying over serial interface. Hands on session where participants will connect sensors with NodeMCU and print the values. Session Quiz Continued work on circuits, io	17-1
Actuators NodeMCU- Prototyping platform for IoT	Actuation with LED, buzzers. Interfacing with LCD. Interfacing with motors. Sensing and actuation combined, Hands on exercises. Session Quiz NodeMCU module. Hardware overview. Integrated development environment. NodeMCU Pin-out. Practice sessions where participant will create basic circuits using NodeMCU. Session Quiz	
Node MCU WI-Fi Basics. Connectivity	Node MCU Wi-FI hardware and software. Connectivity basics. TCP/IP protocol. Creating a web server	
Creating an IoT Device	Sensing with NodeMCU and sending to Thing Speak using Wi-Fi. Practice session. Session Quiz	April 1989

2. The second party shall provide Facilitators who are competency to impart the training. The training will be conducted by senior professionals with industry experience and lab will be supported by ekLakshya Learning Enablers. The unique feature of the program is building the theoretical base, hands-on technical skills along with behavioural skills all of which are critical in building a career.

The First party shall not be responsible for the behaviour, conduct or any miss deeds of the facilitators and any other staff of the second party and they shall not claim anything including any monetary benefits from the first party.

3. The participants who are enrolling in the programme shall have the following prerequisites:

a) Each participant must have background of programming. C/C++ exposure will be preferred. They must be able to write programs, compile them and run them.

For EKLAKSHYA ACADEMY LLP

Page 5 of 7

Registrar, VTU Belagavi

FOR EKLAKSHYA ACADEMY 1138

- b) Suggested Audience are those who have completed BSc/Diploma/BCA or B.E/B.Tech in CSE, ISE, ECE and EEE.
- c) Students of other branches (Mechanical, Civil) can also attend provided they meet the pre requisites as stated in section 3.a) and should have interest in software development.
- 4. Hardware and Software Resources.
 - a) The first party shall provide required Desktops/Laptops to students to conduct the course.
 - b) That second party shall provide development kit and online account for each participant in ThingSpeakcloud platform and also pre load Arduino IDE at the link into the system.
 - c) Number of Participants

 That a maximum of 25 participants shall make the program effective.

 Participants are expected in groups of 2 for doing the exercises as part of the classroom forming 10-12 project teams with one Learning Enabler to make project teams and plan project reviews.
- 5. The second party shall also have the following Responsibilities
 - a) Selection of Trainees [written test and Interview]
 - b) Creating, conducting and evaluating online quizzes.
 - c) Conducting classroom session at the College campus.
 - d) Selection of project topics.
 - e) The oral presentation and demo of the project shall be reviewed.
 - g) Two job interviews per trainee.
- 6. Certification

The First party shall issue a certificate to all participants who fulfilsthe criteria which is described below

- a) Successful Completion of pre session assignment
- b) Active participation in 12 week onsite classes.
- c) Project presentation/participation in reviews
- d) Successful Completion of 3 online quizzes
- 7. The first party shall collect fees from each student for providing the training on the course and issuing the course completion certificate. The course fees are as under:
 - a) Rs.25,000.00 per student who has Diploma/BCA/B.Sc background.
 - b) Rs.30,000.00 per student who has B.E/B.Tech background.

That out of the above fees collected, The First Party shall pay a sum of Rs.22,500.00 (Rupees Twenty Two Thousand Five Hundred only) for each Diploma/BCA/B.Sc student and Rs. 25,000.00 (Twenty Five Thousand only) for each B.E/B.Tech student to the second party after deducting all applicable taxes.

Company

For EKLAKSHYA ACADEMY LLP

Page **6** of **7**

Registrar, VTU, Bellagavi

egr

DESIGNATED PARTNER

7.1 Payment Terms

- a) That First party shall pay the above said amount of Rs.22,500.00 (Rupees Twenty Five Thousand Sixteen only) and Rs.25,000 (Twenty Five Thousand only) in three instalments each on before 5th of each month after deducting all applicable charges.
- b) Payment to be made via direct electronic transfer as per below details.
- c) Online bank transfer/cheque issue can be done in the name of "EKLAKSHYA ACADEMY LLP" Account No.: 916020038798827, Bank Name: Axis Bank, Branch: Banashankari, IFSC code UTIB0000102
- d) This agreement is valid for a period of 12 months from the date of signing of this agreement.
- e) This agreement may be renewed for further period of 12 months with the terms and condition to be agreed thereon for the purpose of the conducting the program.
- f) Nothing in the agreement is intended to, or shall be deemed to, any partnership or joint venture between the parties and authorized any party to make or enter in to any commitments for on or behalf of any other party.
- 8. Dispute

In the event of any dispute between the parties, the same shall be settled amicably. In case the dispute is not settled amicably then the same shall be referred to a single arbitrator who is appointed with consent of both the parties. The award of arbitrator is final and binding on both the parties. The language of the arbitration shall be in English and place of the arbitration shall be in Belagavi.

This agreement is in two original copies and the respective parties shall retain the one of them.

IN WITNESS WHEREOF the parties have subscribed their respective signatures on this agreement on the day and the day herein above mentioned.

WITNESSES:

uday Rayaraddi

The Registrar, VTU, Belagavi
(First Party)

ekLakshya Academy represented by its CEO Ms. Poornima Mohanchandran.

(Second Party)

MEMORANDUM OF UNDERSTANDING

National Education Foundation

and

Visvesvaraya Technological University

This MEMORANDUM OF UNDERSTANDING is entered into on this 7^{h} day of August. 2015 by and between:

National Education Foundation (NEF) a nonprofit leader head quartered at Washington DC, 1350 Beverly Road, Suit 219, McLean, VA 22101 one of the largest organisation in the World engaged in bridging the employability, digital and academic divides by providing high quality affordable 21st century online education with total solution model with blended learning in education and technology and awarding certificate through State University of New York for each of the successful students.

AND Visvesvaraya Technological University, Jnana Sangama, Belagavi-590018 an University imparting education in Engineering and Management at their departments and affiliated colleges in Karnataka (hereinafter referred to as VTU for brevity's sake, which term shall mean and include its successors, assigns etc.) and represented by its Registrar.

WHEREAS NEF is an established educational and skill development organization with the objective of establishing management institutions, colleges, centers for management studies and research and to achieve this objective it may become an affiliate of an University/ Foundation and conduct such programs of the Universities so affiliated to.

- 1. IT Skills
- 2. Office Productivity and IT skills
- Program on Enterprise and Soft Skills
- 4. Digital Literacy
- 5. Setting up of Stem +
- Setting up of NEF VTU Skill Development Center.

WHEREAS Visvesvaraya Technological University is an University imparting education in Engineering and Management at their departments and affiliated colleges in India and with a mission to impart quality education, training, skill enhancement, global exposure to the students, faculty and Alumni.

01 OBJECTIVE

WHEREAS NEF is desirous of extending the above programs to the members of the above cited 3 & 6, so that the participants of the above programs get an opportunity to acquire the above specialized skills which gives them professional advantage and edge over others, by two Organizations mutually collaborating with each other to achieve the aforesaid desired goal. Accordingly, all the above parties have, after discussion, agreed to reduce the understanding arrived at between them into writing to make the objective of this association achievable, successful, and beneficial to the participants in specific, and to the society at large.

The essence of this Memorandum of Understanding between NEF and VTU shall be integrity, ethical practices, and scrupulous adherence to the laws of the land and above all mutual trust and respect for each other.

02 NOW THIS MEMORANDUM OF UNDERSTANDING WITNESSES:-

In consideration of the mutual benefits accruing to parties from the association, it is agreed to adhere to the regulations as specifically detailed in the annexure. 'H' describing the roles and responsibilities, commercial terms between the parties agreed here upon.

02A Setting up of NEF-VTU Skill Development Center at VTU, Belagavi

03 TERM

This MEMORANDUM OF UNDERSTANDING shall be in force for a period of three (3) years commencing from the date on which these presents are executed by all the parties. The same can be extended for a further period by mutual agreement by exchange of letter

04 TERMINATION

The MOU can be terminated on the happening of any cf the following events:

The parties mutually agreeing that it shall be terminated for failure of the objective.

That there is non-compliance of the obligations by one of the parties and the same is not cured within 90 day notice by the non-defaulting party to rectify the same.

By any statutory disability to continue the association.

05 CONFIDENTIALITY

Both the Parties shall keep confidential all knowledge, information they acquire during their association. Such communication, information that is desired by the party sending the information to be kept confidential, shall inform the confidential nature of such information to the receiving party. Confidential information includes, without limiting the generality of the foregoing, information relating to intellectual property of NEF University like, courses offered, design of the courses, particulars of the faculty members, contents of the tutorials, webcasts, and pod-casts, details regarding the fee payable, scholarships, faculty details and/ or such other information to which the Institute may have access in the course of the association and terms of agreement which forms as part of this agreement through Annexure.

06 COMPLIANCE WITH LAWS

All the parties shall carry out their respective obligations under this MoU in strict compliance with all relevant laws.

07 NOTICES

Any notice, approval, advice, report or any other communication required to be given under this MOU shall be in writing and may be given by delivering the same, by sending the same by prepaid registered mail or email to the notified address set forth below or such other address as each Party may notify in writing to the other Party from time to time. Any such notice given as aforesaid shall be deemed to be served or received at the time upon delivery or upon actual receipt (if given by email) or fifteen (15) clear cays after Posting

08 DISPUTE RESOLUTION

In case of any dispute arising as regards the interpretations of the provisions of this MOU, both the parties shall resolve the same by mutual consultations. In the event of failure at conciliation, the matter may be referred to arbitration. The Chairman NEF and Head of the Institution in consultation are authorized to appoint an Arbitrator to resolve the dispute. The decision of the Arbitrator shall be final and binding on both the parties. However, the spirit of this MoU is to ensure that there shall be no such occasion for dispute and resolution of the same.

09 DISCLAIMER OF LIABILITY

In no event will either party be liable to the other or any person or entity for loss due to the acts of the other party in pursuance to this MoU on any account whatsoever for deficiency in service or any acts of the defaulting party, nor for any specal, consequential or incidental damages, under any cause of action, whether for breach of contract, tort (including negligence) or otherwise.

IN WITNESS WHEREOF the parties above named have signed this Document on the day, month and year written above.

FCR National Education Foundation - Prof. M. B. Gurtifai

Vice President, NEF

FOR Visvesvaraya Technological University - Prof.K.E.Prakash

Registrar, VTU

Witness 1

Necessary (C.Nataraju) SO, V.TU. Belagavi.

Witness 2

Meg (M.V. Rayappe) S.O. VTU, Belagavi

26.09.2017

In continuation to this MoU programme on employability skills to the students of PG Centres and UBDTCE, Davanagere to be implemented from second week of October, 2017 on payment Rs.250/per student and as per letter dated:26.09.2017.

Gururai President, NEF

for Registrar VTU





VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Note Page:	Page No.:	
File No. :	Da	te : 12-01-2017

Subject: MoU with DMG Mori India Private Limited

Submitted:

- 1) VTU National Academy for Skill Development had requested the DMG Mori India Private Limited to sponsor CNC machines and also provide technical assistance under the scheme of "Corporate Social Responsibility" for establishment of CNC Skill Training Centre at Dandeli.
- 2) DMG Mori Private Limited has in principle agreed to extend sponsoring CNC machines and to provide technical assistance as per the stipulated guidelines of CSR scheme.
- 3) Both the parties have to undergo a memorandum of Understanding to fulfill the terms and conditions.
- 4) A draft MoU copy is prepared and is proposed to signed between the Deputy Managing Director, DMG Mori India Private Limited and the Registrar, Visvesvaraya Technological University
- 5) The matter is placed for kind consideration and action.

6) N.Sanjeev Kumar

7) Director, VTU-NASD

8) Registrar, VTU | Refer to legal opinion the later opinion .

9) Hon'ble Vice Chancellor, Approved Permitted opinion.

12 opt for Earl opinion.



INDIA NON JUDICIAL Government of Karnataka

e-Stamp

Certificate No.

Certificate Issued Date

Account Reference

Unique Doc. Reference

Purchased by

Description of Document

Description

Consideration Price (Rs.)

First Party

Second Party

Stamp Duty Paid By

Stamp Duty Amount(Rs.)

IN-KA51597957288293O

14-Dec-2016 03:25 PM

NONACC (FI)/ kacrsfl08/ PEENYA2/ KA-BN

SUBIN-KAKACRSFL0852761616852906O

DMG MORI INDIA PRIVATE LIMITED

Article 12 Bond

AGREEMENT

0

(Zero)

DMG MORI INDIA PRIVATE LIMITED

VISVESVARAYA TECHNOLOGICAL UNIVERSITY DANDELI

DMG MORI INDIA PRIVATE LIMITED

(One Hundred only)





.....Please write or type below this line-----

Memorandum of Understanding (MoU) between the Visveswaraya Technological University -National Academy for Skill Development - VTU-NASD, Dandeli (Skill Development and **Enhancement Training Center) and DMG Mori India Private Limited**

This Memorandum of Understanding (MoU) is made on February 3, 2017 between

"DMG MORI INDIA PRIVATE LIMITED" (First Party), a Company, established under the Companies Act, 1956/2013 having registered office 3/1, 3rd Main Road, K.I.A.D.B. Peenya

Statutory Alert:

Visvesvaraya Technological University The authenticity of his Starp Carificate should be verified at "www.shcilestamp.com" available on the website randers it invalia.

The onus of checking the legiticacy is on the users of the certificate

It in case of any discrepancy please inform the Competent Authority

1

1st Stage, Ward No.1, HMT, Bangalore 560058, India with CIN U02922KA1999PTC024994 represented by Mr. Sunil K Rao, Dy. Managing Director, which expression shall unless it be repugnant to the context or meaning thereof shall mean and include its successors-in-interest and permitted assigns, of the First Part.

AND

Visvesvaraya Technological University (Second Party) — National Academy for Skill Development, VFD-VTU-NASD, represented by its Registrar, having its Head Office at Uttara Kannada District, Karnataka — 581 325 referred to as VTU -NASD which term shall include its successors & assigns of the second part.

DMG Mori India Private Limited and Visvesvaraya Technological University — National Academy for Skill Development collectively referred to as PARTIES.

- Whereas the second party approached the first party to sponsor CNC machines and avail technical assistance under the scheme of 'Corporate Social responsibility" for establishment of CNC Skill Training Center at Dandeli. The First Party agreed in principle to extend sponsoring CNC machines and to provide technical assistance as per the stipulated guidelines of the CSR scheme.
- 2. Commitment of the Visvesvaraya Technological University National Academy for Skill Development:
 - i. VTU-NASD to set up a Skill Training Center at Dandeli to offer Courses on Machine Tools Industry and training in:
 - a. CNC Machine Operator Training;
 - b. CNC machine Programmer Training
 - ii. VTU-NASD to invest in setting up workshop, lab and make available all the necessary required arrangements to make the workshop / lab running. All safety and security measures with respect to running and maintenance of workshop, machine and lab is the responsibility of VTU-NASD only.
 - iii. VTU-NASD to complete the establishment of Training Center within 2 months from the date of signing the MoU.
 - iv. VTU-NASD to start the training within 1 month of delivery of machines.
 - v. VTU-NASD to utilize the CNC machines only for educational purpose and not for any commercial purpose.
 - vi. VTU-NASD to impart Skill Training to a minimum of 200 trainees in the first year of operation and 300 candidates from the second year onwards.

vii. VTU-NASD to offer training to candidates selected by the technical committee constituted by the Advisory Council of VTU-National Academy for Skill Development.

Page 2 of 10

REGISTRAR
Visvesvaraya Technological University
BELAGAVI.

- viii. VTU-NASD shall install / fix a name board in a prominent place in the premises indicating the name of the sponsoror i.e. DMG Mori India Private Limited, the programme, the Scheme etc.
- The project proponent shall adhere to the provision of the Child Labour Act 1966, ix. in the matter of the employment.
- The VTU-NASD to employ special trained CNC operator/engineer to take care of the machines and training.
- xi. Preference to be given to the candidates belonging to the SC/ST/BC/PH/Women and students of North Karnataka region in providing training.
- xii. VTU-NASD will take necessary actions to run the training program successful.
- xiii. VTU-NASD to arrange and provide employment opportunities to the trained candidates.
- VTU-NASD to install compulsory surveillance CCTV at the training center and also xiv. attendance shall be monitored through biometric enabled GPRS attendance system.
- VTU-NASD shall strictly follow the rules & regulations laid XV. NSDC/NCVT/State Government from time to time.
- VTU-NASD shall adhere to all other terms and conditions of the scheme. xvi.
- xvii. VTU-NASD shall submit the machinery and equipment installation report duly certified by the Registrar VTU, Dandeli.
- xviii. VTU-NASD shall follow the export control regulation set up by the government of the jurisdiction in which the manufacturer of the Machines (as defined below) is located, shall not use the Machines, their replicas or their technologies for the development and/or the manufacturing of weapons of mass destruction (nuclear weapons, biological weapons, chemical weapons and missiles), or for any other military purposes. VTU-NASD shall use the Machines, their replicas or their technologies for civil purposes only.
- xix. VTU-NASD shall support DMG MORI India Private Limited to collect all necessary paper works which are required for export license application to be filed before the competent authorities in the jurisdiction applicable to the manufacturer of the Machines.

Visvesvaraya Technological University Page 3 of 10

In case any new IP (as defined below) is developed by VTU-NASD or any third party XX. when using the Machines (the "Developed IP"), VTU-NASD shall promptly notify DMG MORI India Private Limited in writing of any such Developed IP and VTU-NASD shall provide further information regarding such Developed IP requested by DMG MORI India Private Limited. All Developed IP shall belong to and owned by DMG MORI India Private Limited All and any decision on the filing of the relevant IP Application (as defined below) or on keeping such Developed IP as trade secret shall be in the sole discretion of DMG MORI India Private Limited VTU-NASD shall disclose DMG MORI India Private Limited all information and documents necessary to register the IP Application and shall take any steps in order to reasonably assist DMG MORI India Private Limited in the registration procedure. For the avoidance of any doubt, any IP owned by DMG MORI India Private Limited (or one of its affiliates) which existed and was conceived or obtained either (i) prior to entry into force of this MoU or (ii) outside of the scope of work performed pursuant this MoU (the "Foreground IP"), belongs to DMG MORI India Private Limited (or its affiliates).

For the purpose of clause 2 (xxii) the following terms shall have the following meaning:

IP shall mean any and all ideas, discoveries, inventions, improvements, know-how, designs, formulas, algorithms, processes, software, business information, technical information, data, test results, apparatus and methods and other proprietary information, whether patentable or otherwise registrable or not, and all patents (including, but not limited to, all reissues, continuations, continuations-in-part, revisions, extensions, divisionals, designs and re-examinations thereof), utility models, mask works, copyrights, trademarks, service marks, logos, designs, slogans, trade names, trade secrets, confidential information and other forms of intellectual property protection related thereto, including all registrations therefor. IP Applications shall mean any patent application, division, continuation or continuation-in-part, and any patents issued thereon or reissues or extensions thereof, and all other forms of applications for registration of copyright, trademarks, designs and other IP rights relating to the relevant Developed IP.

xxi. Within 2 weeks before publishing anything (including, but not limited to any journal, thesis etc.) or present at any national, international or professional meeting the findings, methods and results derived from developing Developed IP, VTU-NASD shall inform DMG MORI India Private Limited about such planned publication. Unless explicitly approved by DMG MORI India Private Limited, such publication shall not contain any confidential information according to clause 6 nor any Foreground IP.

3. Commitment by DMG Mori India Private Limited:

 DMG Mori India Private Limited after careful scrutiny of the proposal submitted by VTU-NASD, DMG Mori India Private Limited agreed to sanction required Machine/

Page 4 of 10

RÉGISTRAR
Visvesvaraya Technological University
BELAGAVI.

Equipments to VTU-NASD under CSR for the purpose of setting Skill Training Center at Dandeli.

ii. DMG Mori India Private Limited to sanction the following one high end CNC machines (the "Machine")

Type :

High dynamic Vertical Drill-Tap Centre with

best milling performance

Manufacturer

Deckel Maho Seebach GmbH

Model Serial Number Milltap 700 15995735564

Value :

Rs., 1,13,00,000/-

Note: Machine specification listed in Annexure A to this MOU.

- iii. As long as the Machines are owned by VTU-NASD and used in line with clause 2 of this MoU, DMG Mori India Private Limited has to provide all preventive and repair maintenance at site for a period of one year.
- 4. This MoU will be effective from the date as written above.
 - The obligations set out in Clause 2 (xxii) and Clause 6 of this MoU shall carry on in force for a period of five (5) years from the termination or expiry of this MoU.
 - The right of either party to terminate this MoU for extraordinary cause remains unaffected. Cause for termination by the parties shall include, but not be limited to, the following:
 - i. Serious breach of this MoU leading to the loss of mutual trust or the basis of the business. This, for instance, applies if the parties are in breach of clause 2(xx), Clause 2(xxii) and clause 6 of this MoU.
 - Application for opening of insolvency proceedings as well as the refusal to open in-solvency proceedings for lack of assets, or the issue of a declaration in lieu of an oath, or any similar proceeding; and
 - iii. Full or partial and significant closure of business, with an actual or anticipated duration of more than eight (8) weeks.
- 5. Both Parties understood and agreed that, the operational guidelines for implementation of the Scheme, which are binding on them.
- 6. For the purpose of this MoU the following terms shall have the following meaning Confidential Information shall mean any device, materials, samples, software programs, documents, data, graphics, specifications, technical information, or any other information, whether oral, written, visual or otherwise, or hard or electronic soft copy, collectively referred to as "Information", that is disclosed by the Disclosing Party to the Receiving Party that in the case of tangible disclosure, is clearly marked as confidential or proprietary and in the case of an oral or visual disclosure, the Disclosing Party

Page 5 of 10

PERISTRAR

Visvesvaraya Technological University BELAGAVI.

CANCALORS A

identifies such disclosure as being confidential concurrent with the oral or visual disclosure and delivers to the Receiving Party a written statement within thirty (30) days to the effect that such disclosure is confidential. "Disclosing Party" shall refer to the party of this MoU which in the context is disclosing the Information. "Receiving Party" shall refer to the party of this MoU which in the context is receiving the Information. The Receiving Party agrees to use the Confidential Information of the Disclosing Party solely for the purposes of this MoU. The Receiving Party undertakes to treat as confidential and not disclose to any third party, wholly or partly, such Confidential

The obligations according to paragraph 6.1 of this Contract do not apply to Information which the Receiving Party can prove that:

it is or has become available to the public without breach of this MoU;

Information of the Disclosing Party obtained during the execution of this MoU.

- it was, as the Receiving Party can show by written or other tangible evidence, in its possession at the time of disclosure and was not obtained directly or indirectly from the Disclosing Party;
- it is received without restriction on disclosure from a third party who is not under any obligation of confidentiality to the Disclosing Party with respect of such disclosure;
- it was independently developed by the Receiving Party provided it did not have access to the disclosed Confidential Information hereunder;
- it is received by written permission from the Disclosing Party to disclose;
- it is required pursuant to a valid court order provided that the Receiving Party shall give the Disclosing Party prompt written notice of any such requirement and cooperates with the Disclosing Party in attempting to limit such disclosure;

The Receiving Party shall not be prevented from disclosing the Confidential Information to its faculty members, PhD students, students and employees, and in the case of DMG Mori India Private Limited, it shall not be prevented from disclosing the Confidential Information to its affiliated companies or their employees, who have a need to know for the performance of this MoU ("Authorised Representatives"), provided that the Receiving Party has taken all precautions which can reasonably be expected to prevent these Authorised Representatives from using for themselves or for others or from passing on to others any of such Confidential Information made accessible to them. The Receiving Party hereby assumes full liability for the compliance with all of such Authorised Representatives' obligations hereunder. As far as legally possible, the Receiving Party agrees to impose the secrecy obligations substantially similar to this MoU on their Authorised Representatives, for the time doing research or being employed, as well as for the time after their departure, to treat as confidential and not disclose to any third party, wholly or partly, Confidential Information disclosed to them pursuant to this Contract.

6. No party shall assign this MoU or the obligations and rights under this MoU to any third party without the prior written consent of the other party wherein such a written consent shall not be unreasonably withheld. It being understood, however, that no written consent shall be required in case of an assignment of this MoU or the

Page 6 of 10

REGISTRAR
Visvesvaraya Technological University
BELAGAVI.

	C-M3021	Tool taper BBT 30 – Big+	
		Pull stud MAS 403 - 45°	
	C-D3052	Tool magazine 25 places	
		(suitable for inclusion in the tool spindle)	
		Chip-to-chip time 1.7 sec	
***************************************	C-K4230*	Nano Package	•
		Improved Temperature stability	
		Only combinable with 24,000rpm	
		or 10,000rpm high torque spindle	
		possible	
	C-G3300	Rotary lead through for integrated	
		swivel rotary table with torque drives	
		4- flute, 2x for air, 2x for oil	
		Including fix plate and fast	HERMANIN ME
		coupling at machine rear side	
	C-K4250	RENISHAW measuring-Kit for MillTap 700	
		suitable	Miller des la constitución de la
		to tool taper System in Spindle	
		OMP40-2 touch probe with optical signal	
		transmission	
	1.	OTS wireless probe with air purge on machine	
		table	
		OMI-2T optical transmission module	
		Plastic carrying case	
		Calibration tool incl. tool holder	
4		Job Shop Software package	
	C-K3345*	Swarf removal package 15bar ICS includes:	
		Swarf conveyor (Scraper drag type with	
		integrated "flat bed" sheet)	
		Discharge height: 600mm,	
		Tank capacity: 200 I	
		Cabin roof; machine height 2580 mm	
		Pump for external coolant supply: 3,5bar @ 20	
		1/min	
		Coolant-air blast-changeover external via M-	
		command	
		Pump for inner coolant supply: 15bar @ 8 l/min	
		Single Cartridge Filter	
		Tool cone cleaning function via 2 additional	
		nozzles	
		at spindle stock	
		Magazine exchange pocket cleaning function via	
		2 additional nozzles in tool magazine	
	C-H3029	Electronic hand wheel	

	C-B3010	PROGRESS line	
		Digital Cycle-time	
en e		Graphic rest time	
		Product counter	
	C-H3077	Safety package for power failure	
		Overload limiter	
		Under voltage monitoring	
	C-H3088	Cabin roof	
	C-G1021	Chip Trolley MillTap design	
		inkl. screen plate and drain valve	
	C-N3099	Tropical package for 24,000rpm and	
		10,000rpm high torque spindle	
		For machine environmental temperature up to 50°C	
		including active cooling unit for electrical cabinet, Spindle	
		24,000rpm and spindle motor for 24,000rpm / 10,000rpm high torque.	

- obligations and rights under this MoU by DMG Mori India Private Limited to any of its affiliated companies.
- 7. This MoU shall be construed and governed by the Laws of India. The competent courts in Bangalore shall have exclusive jurisdiction.
- 8. In case of any dispute relating to this MoU, the same shall be settled by way of Arbitration. The Chief Executive Officer of DMG Mori India Private Limited or his nominee is authorized to appoint the arbitrator under the provision of Arbitration & Conciliation Act 1996 shall apply to arbitration.

IN WITNESS WHEREOF the parties hereto have executed this Memorandum of Understanding as on the date written above at Bangalore.

Deputy Managing Director

DMG MORI India Private Limited

No 3-1, 3rd Main Road, K.I.A.D.B,

Peenya 1st Stage, Ward no1, HMT IN-560058

Bangalore

Witness:

Witness:

Karnataka

JnaggLAC Savigama"

varaya Technological University,

Belagavi - 590018,

Mayet 3/02/2017 (N. Sargen Kurner)

Page 7 of 10

ANNEXURE A

POs s	Ident No.	Description	Quantity	Total
3	C-A4210*	Addition 700		Cost in EUR
10	C-A4210	MillTap 700	01 No.	
10		High dynamic Vertical Drill-Tap centre with best milling performance		-
	The state of	X = 700 mm, Y = 420 mm, Z = 380 mm		
		X = 27.5 inch, $Y = 16.5$ inch, $Z = 15$ inch		
		60 m/min / 197 ft/min Rapid feed		
		Acceleration 10 / 10 / 18 m/sec ²		
		Speed range 20 to 10.000 r.p.m		
		AC-Main drive with 25/4,5 kW / 33,5/6 hp		
		(max./100%ED)		
		Dynamic powerful main spindle with		
		max. 45 Nm torque		
		Tool taper BT30 JIS B6339		
		(MAS 403 - 45°)		
		Tool clamping according to B6339	es — bodin	
		(MAS 403 - 45°)	ME - 84 B.A	
		Mechanical Tool changer Disk type		
		15 places BT30		
		Tool change time 0.9s and 1.5s C-t-C		
		Table dimension 840x420 mm / 33 x 16,5"		
1		Chip pan for dry cutting Indirect Measuring		
		system X,Y,Z		
	C-B3084*	3-D Control Siemens 840D solution line		
		10" screen		
	C-C3220*	Integrated swivel rotary table		
		5-Axis simultaneous mode!		
		Torque drives incl. direct measuring		
		in A- and C-Axis		VA COLOR
		Swivel range A-Axis -100 / + 120 degree		
		Max. load C-axis 100kg		
		Table diameter C-Axis d200mm		
		Inclusive Software package Job Shop		
		and Sinumerik Mdynamiks 5-axis		
	C-E3050*	Spindle 24,000rpm		
		with tool taper BT30 JIS B 6339 (MAS 403-45°)		
		AC-Motor 20 / 4 KW (max. / 100% ED)		
		Watercooling Spindle and Spindle motor via		
		heat exchanger (fan)		***************************************

ANNEXURE A

POs	Ident No.	Description	Quantity	Total
S	0	Sea Villemit side	Legisla Li	Cost in EUR
10	C-A4210*	MillTap 700 High dynamic Vertical Drill-Tap centre with best milling performance X = 700 mm, Y = 420 mm, Z = 380 mm	01 No.	C-K42230
		X = 27,5 inch, Y = 16,5 inch, Z = 15 inch	18800 L	
		60 m/min / 197 ft/min Rapid feed Acceleration 10 / 10 / 18 m/sec ²	udoli eviva	0.63300
		Speed range 20 to 10.000 r.p.m AC-Main drive with 25/4,5 kW / 33,5/6 hp (max./100%ED)	noil - P includ	
		Dynamic powerful main spindle with max. 45 Nm torque	RENIS	Скузэр
		Tool taper BT30 JIS B6339 (MAS 403 - 45°)	10 100	
		Tool clamping according to B6339 (MAS 403 - 45°)	CMPA TEARS	
		Mechanical Tool changer Disk type 15 places BT30	table OMI-2	
		Tool change time 0.9s and 1.5s C-t-C Table dimension 840x420 mm / 33 x 16,5"	Mereld,	
144		Chip pan for dry cutting Indirect Measuring system X,Y,Z	12 dol 1	PAFENO
	C-B3084*	3-D Control Siemens 840D solution line 10" screen	Swarf integr	
	C-C3220*	Integrated swivel rotary table 5-Axis simultaneous mode!	a Anel 1	
		Torque drives incl. direct measuring in A- and C-Axis	gmag	
		Swivel range A-Axis -100 / + 120 degree Max. load C-axis 100kg	nimų , ieloodė į .	
		Table diameter C-Axis d200mm Inclusive Software package Job Shop	Pemp	
		and Sinumerik Mdynamiks 5-axis		66 J. [1]
	C-E3050*	Spindle 24,000rpm with tool taper BT30 JIS B 6339 (MAS 403-45°) AC-Motor 20 / 4 KW (max. / 100% ED) Watercooling Spindle and Spindle motor via	norzie at spir Magaz	

	C-M3021	Tool taper BBT 30 – Big+ Pull stud MAS 403 - 45°		A SHUX
	C-D3052			
	C-D3032	Tool magazine 25 places		sie mocht
	The second of	(suitable for inclusion in the tool spindle)		
1 175	JE,III ERRO	Chip-to-chip time 1.7 sec		
	C-K4230*	Nano Package	2-1-11-11-1	0.200
		Improved Temperature stability	7.712.71	
		Only combinable with 24,000rpm	EMHINI I	
		or 10,000rpm high torque spindle	37 × 7	
4		possible	(A = A)	
	C-G3300	Rotary lead through for integrated	/m #0	
		swivel rotary table with torque drives	неооА-	
	Y	4- flute, 2x for air, 2x for oil	peace i	
		Including fix plate and fast	IM-DA	
		coupling at machine rear side	(3360)	
	C-K4250	RENISHAW measuring-Kit for MillTap 700	TENYU	7.1
		suitable	V 38(7)	
3		to tool taper System in Spindle	a looT	
		OMP40-2 touch probe with optical signal	(MAS	
		transmission	o looT	
		OTS wireless probe with air purge on machine	(MAS-	
		table	Mechi	
			15 ola	
		OMI-2T optical transmission module	a loot	
		Plastic carrying case	side!	
		Calibration tool incl. tool holder	o nida	
	0.1100.124	Job Shop Software package	monovo	
	C-K3345*	Swarf removal package 15bar ICS includes:	in n.e	ENDOCA Y
		Swarf conveyor (Scraper drag type with	10 to 1	70000
		integrated "flat bed" sheet)	46 74	
		Discharge height: 600mm,	Integra	C-C3220*
		Tank capacity: 200 l	alva 2	
		Cabin roof; machine height 2580 mm	annered	
		Pump for external coolant supply: 3,5bar @ 20	A A	
		I/min		
		Coolant-air blast-changeover external via M-	1 ATVIVE	
		command	Market Committee	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pump for inner coolant supply: 15bar @ 8 l/min	1 9/09	
		Single Cartridge Filter	TERKXIII	
		Tool cone cleaning function via 2 additional		
		nozzles		C-E3050*
		at spindle stock		
	200	Magazine exchange pocket cleaning function via		
		2 additional nozzles in tool magazine		
	C-H3029	Electronic hand wheel	a lasth	
	C-113023	Lieuti Offic Hariu Wileer		

C-B3010	PROGRESS line		
	Digital Cycle-time		
	Graphic rest time		
	Product counter		
C-H3077	Safety package for power failure		
	Overload limiter		
	Under voltage monitoring		
C-H3088	Cabin roof		
C-G1021	Chip Trolley MillTap design		
	inkl. screen plate and drain valve	(
C-N3099	Tropical package for 24,000rpm and	2	
	10,000rpm high torque spindle		
	For machine environmental temperature up to 50°C		
	including active cooling unit for electrical		
	cabinet, Spindle		
	24,000rpm and spindle motor for 24,000rpm /		
	10,000rpm high torque.		