Association of MAURITIAN MANUFACTURERS

HRDC
Human Resource Development Council

COURSE & TRAINING SUPPLY

Manufacturing sector

Final Report

May 2022

AEQUATIO
PERFORMANCE SOLUTIONS

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CONTEXT & OBJECTIVES

Context

The AMM is a private sector organisation, more specifically representing the interests of local manufacturers.

The AMM has the mission of promoting local manufacturing and supporting the transformation of the Mauritian manufacturing sector. The AMM itself is undergoing a transformation and aims at operating as a Think & Do Tank for the sector; to be successful in tackling collectively deep technological, behavioural and environmental evolutions.

Following a skills needs exercise that shed light on the skills needs of the industry, AMM wishes to pave the way to the next step: a training network. As such AMM requires a better understanding of the supply of training and courses offered by different institution and their relevance to the demands of the industry to assist them in their future discussion and developments.

Moreover, given the unprecedented situation with Covid, AMM wishes to reconvene with AMM members to assess the changes and challenges of the industry in terms of skills needs after two years of Covid

Objectives

- Catalog the supply of industry-related courses offered by institutions
- Evaluate the fit of their courses and trainings supply to the demands of the industry
- Assess any relevant changes to the results of the skills needs study
- Understand how the limitations and challenges of Covid have impacted skill needs
- Understand expectations of AMM towards the skills need platform

Key Action Standards

- Co-design with training institutions the best solutions to current and future needs of the industry

COURSE AND TRAINING SUPPLY

METHODOLOGY

Method	Desk Research
Scope	Posts/Skills defined as Priority 1, 2 & 3 by the AMM
Target information	Priority 1: List of courses + relevant modules Priority 2 & 3: List of courses
Sources	• HRDC • Institution websites • Institution pamphlets • Social media sites • Other relevant websites

Note: Complementary information were also requested by email

PRIORITY POST RATIONALE

Weight (next 5 years)

-% of companies
-No. of positions

Consisted of:

Priority 1 & 2
Important to running of industries w/ high demand in terms of no of positions

Technical

78%
n=1425

- Engineers & other graduate specialists
- Technicians
- Craftsperson

Production/ Operations/Logistics

65%
n=1433

- Machine operators
- Warehousing
- Drivers
- Freight & supply chain

Priority 3
Increasing need for sales/marketing in industry with relatively low demand in figures

Sales/Marketing

67%
n=358

- Merchandisers
- Salespersons
- Marketing & Branding
- Communication

Management

36%
n=74

- Managers of different departments and specialisations

Priority 3
Relatively easy to fill job postings but essential to any company

Admin

27%
n=41

- Secretaries
- Accountants
- Admin officers
- Human resources

DATA COLLECTION PROCESS

- The following slides compare, for different position, courses that are likely to apply to them and sorts them into three categories defined as follows:
  - Qualifying - The course will likely make its graduate directly qualified for the position.
  - Incomplete – The course has some elements of interest to the position without fully qualifying a graduate for it
  - Non-found – There are no courses that were found that fit the needs of this position
- The courses were deemed to fit into the above categories through information gathered:
  - Within the course descriptions – which may already provide career areas that it may lead to
  - Online job descriptions and requirements – which would point towards specific courses/degrees or modules/learning required
  - As such it should be noted that the information presented may not entirely fit the expectations, requirements or views of Mauritian manufacturers and institutions but is a base for further discussions and analysis by AMM and their partners
- Modules content of courses are found in the appendix section and only contain modules within courses which are:
  - Most relevant and likely core to the position
  - Common to the courses and that may be of peripheral value to the position
  - Soft skills

SUMMARY

Priority	Category	No of posts by course status			
		Qualifying	Incomplete	Not found	Total
1	Degree level	16	3	1	20
	Technician	9	-	8	17
	Other production	1	-	1	2
	Subtotal	*26*	*3*	*10*	*39*
2	Craftsperson	3	1	3	7
	Logistics	6	1	3	10
	Subtotal	*9*	*2*	*6*	*17*
3	Admin	2	3	-	5
	Sales/Marketing	6	-	3	9
	Subtotal	*8*	*3*	*3*	*14*
	Total	**43**	**8**	**19**	**70**

- Overall, in Priority 1, degree level post tend to find more qualifying course (16/20) while about half are found for technician jobs
- Among Priority 2, craftsperson find about half of courses as qualifying for their post, with 1 being incomplete, whereas more than half among logistics posts seem to find a match (6 qualifying, 1 incomplete)
- Finally, in Priority 3, Sales/Marketing more easily find qualifying courses (6/9) while for admin courses for all posts were found, with 2 being qualifying and 3 incomplete

PRIORITY 1

DEGREE LEVEL– COURSE STATUS

Post	Course Status	University of Mauritius	Université des Mascareignes	Polytechnics Mauritius	University of Technology	MITD
IT Project Manager	Not found					
Micro-biologist	Incomplete	✓				
Soil biologist	Qualifying	✓				
Mechatronics Engineer	Qualifying	✓				
Agronomists	Qualifying	✓				
Automation Engineer	Qualifying	✓	✓			
Product developer	Qualifying	✓				
Formulator	Incomplete	✓		✓		
Robotics engineer	Qualifying	✓				
Industrial engineer	Qualifying	✓				
Industrial IT engineer	Qualifying	✓	✓			
Research & development	Incomplete		✓			
Process Engineer	Qualifying	✓				
IoT engineer	Qualifying	✓	✓			
Chemical Engineer	Qualifying	✓				
Chemist	Qualifying	✓				
Electrical Engineer	Qualifying	✓	✓			
Chemical Technician	Qualifying			✓	✓	
Machine Technician	Qualifying					✓

- Overall, for degree level courses, only 'IT Project Manager' courses were not found while 'Microbiologist', 'Formulator' and 'Research and Development' only found incomplete matches
- University of Mauritius and Université des Mascareignes seem to be the ones fulfilling the most posts in terms of courses

DEGREE LEVEL– LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Agronomists	Qualifying	University of Mauritius	MSc Agronomy	Master's Degree	2 years	Full-time
Automation Digitalisation	Qualifying	Université des Mascareignes	BSc (Hons) Electrical Engineering and Automation	Bachelor's Degree	3 years	Full-time
Automation Engineer	Qualifying	Université des Mascareignes	BSc (Hons) Electrical Engineering and Automation	Bachelor's Degree	3 years	Full-time
	Qualifying	Université des Mascareignes	BEng (Hons) Electrical and Electronic Engineering	Bachelor's Degree	4 years	Full-time
	Qualifying	Université des Mascareignes	BSc (Hons) Electromechanical Engineering	Bachelor's Degree	3 years	Full-time
Chemical Engineer	Qualifying	University of Mauritius	BEng (Hons) Chemical Engineering	Bachelor's Degree	4 years	Full-time
Chemical Technician	Qualifying	Polytechnics Mauritius	Diploma in Pharmacy	Diploma	3 years	Full-time
	Qualifying	University of Technology	Diploma in Bioanalytical Laboratory Technology	Diploma	2 years	Full-time
Chemist	Qualifying	University of Mauritius	BSc (Hons) Chemistry	Bachelor's Degree	3 years	Full-time
Electrical Engineer	Qualifying	University of Mauritius	BEng (Hons) Electrical and Electronic Engineering	Bachelor's Degree	4 years	Full-time
	Qualifying	University of Mauritius	BSc Electrical and Computer Engineering	Bachelor's Degree	4 years	Full-time
	Qualifying	Université des Mascareignes	BEng (Hons) Electrical and Electronic Engineering	Bachelor's Degree	4 years	Full-time
Formulator	Incomplete	University of Mauritius	BSc (Hons) Biological Sciences	Bachelor's Degree	3 years	Full-time
	Qualifying*	University of Mauritius	BSc (Hons) Food Science and Technology	Bachelor's Degree	3 years	Full-time
	Incomplete	Polytechnics Mauritius	Diploma in Pharmacy	Diploma	3 years	Full-time

**Formulator is still considered incomplete as this job may apply to different sectors (e.g pharmaceutical, food, beverages, cosmetics) and the qualifying course likely only applies to food*

DEGREE LEVEL– LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Industrial Engineer	Qualifying	University of Mauritius	BEng (Hons) Mechanical Engineering (Minor: Industrial Systems)	Bachelor's Degree	4 years	Full-time
Industrial IT engineer	Qualifying	Université des Mascareignes	BEng (Hons) Electrical and Electronic Engineering	Bachelor's Degree	4 years	Full-time
	Qualifying	Université des Mascareignes	BSc (Hons) Electrical Engineering and Automation	Bachelor's Degree	3 years	Full-time
IoT Engineer	Qualifying	Université des Mascareignes	BSc (Hons) Electrical Engineering and Automation	Bachelor's Degree	3 years	Full-time
	Qualifying	Université des Mascareignes	BEng (Hons) Electrical and Electronic Engineering	Bachelor's Degree	4 years	Full-time
	Qualifying	University of Mauritius	BSc Electrical and Computer Engineering	Bachelor's Degree	4 years	Full-time
Machine Technician	Qualifying	MITD	Brevet De Technicien (BT) En Fabrication Mecanique - (Maintenance And Production Mechanics)	Diploma	3 years	Full-time
Mechatronics Engineer	Qualifying	University of Mauritius	Beng (Hons) Mechatronics	Bachelor's Degree	4 years	Full-time
Microbiology	Incomplete	University of Mauritius	BSc (Hons) Agricultural Science and Technology	Bachelor's Degree	3.5 years	Full-time
	Incomplete	University of Mauritius	BSc (Hons) Biological Sciences	Bachelor's Degree	3 years	Full-time
	Incomplete	University of Mauritius	BSc (Hons) Crop Technology (Minor: Sheltered Farming)	Bachelor's Degree	3.5 years	Full-time
	Incomplete	University of Mauritius	BSc (Hons) Applied Biochemistry	Bachelor's Degree	3.5 years	Full-time
	Incomplete	University of Mauritius	BSc (Hons) Food Science and Technology	Bachelor's Degree	3.5 years	Full-time
Process Engineer	Qualifying	University of Mauritius	BSc (Hons) Chemical Engineering	Bachelor's Degree	4 years	Full-time
Product Developer	Qualifying	University of Mauritius	BSc (Hons) Sustainable Product Design	Bachelor's Degree	3 years	Full-time

DEGREE LEVEL– LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Research & development	Incomplete	Université des Mascareignes	BEng (Hons) Electrical and Electronic Engineering	Bachelor's Degree	4 years	Full-time
	Incomplete	Université des Mascareignes	BSc (Hons) Electrical Engineering and Automation	Bachelor's Degree	4 years	Full-time
Robotics Engineer	Qualifying	Université des Mascareignes	Master Artificial Intelligence and Robotics	Master's Degree	2.5 years	Part-time
	Incomplete	University of Mauritius	Robotics Foundations 1-Robot Modelling	Non-award	4 months	Part-time
	Incomplete	University of Mauritius	Robotics Foundation II – Robot Control	Non-award	4 months	Part-time
Soil Biologist	Qualifying	University of Mauritius	BSc (Hons) Agricultural Science and Technology	Bachelor's Degree	3.5 years	Full-time
	Qualifying	University of Mauritius	BSc (Hons) Crop Technology (Minor: Sheltered Farming)	Bachelor's Degree	3.5 years	Full-time

TECHNICIANS – COURSE STATUS

Post	Course Status	University of Mauritius	Université des Mascareignes	University of Technology	MITD	College Technique St Gabriel	Others
Air conditioning supervisor	Not found						
Electrical contracting supervisor	Not found						
Offset technician	Not found						
Postpress technician	Qualifying				✓		
Dry wall and ceiling technician	Not found						
Food technician	Qualifying				✓		
Technical operators	Not found						
Agricultural technician	Qualifying	✓					
Facilities management technician	Not found						
Pneumatic Technician	Not found						
Data Technician	Not found						
Refrigeration/Air conditioning technician	Qualifying				✓		
Automation technician	Qualifying		✓		✓		
Electrician	Qualifying		✓		✓		✓
Mechanical technician	Qualifying		✓				
Electrotechnician	Qualifying		✓		✓		✓
Maintenance Technician	Qualifying				✓	✓	

- Out of 17 posts, 9 found qualifying courses while 8 were not found and MITD seems to fulfill nearly all those course needs
- It is important to note that supervisor course for technicians typically are not found in Mauritius and promotions are likely to be more related to experience as opposed to qualification

TECHNICIAN – LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Agricultural Technician	Qualifying	University of Mauritius	BSc (Hons) Agricultural Science and Technology	Bachelor's Degree	3.5 years	Full-time
	Qualifying	University of Mauritius	BSc (Hons) Crop Technology (Minor: Sheltered Farming)	Bachelor's Degree	3.5 years	Full-time
Automation Technician	Qualifying	Université des Mascareignes	Diploma in Electrical Engineering and Automation	Diploma	2 years	Full-time
	Qualifying	Université des Mascareignes	Diploma in Electromechanical and Automation Engineering	Diploma	2 years	Full-time
	Incomplete	MITD	Brevet De Technicien (BT) En Electronique - (Electronics)	Diploma	3 years	Full-time
	Incomplete	MITD	Industrial Electronics NC4	Certificate	1 year	Full-time
Electrician	Qualifying	Université des Mascareignes	Diploma in Electrical Engineering and Automation	Diploma	2 years	Full-time
	Incomplete	JSS Academy	Level 3 IVQ Diploma in Engineering – Electrical and Electronic Engineering (F/T & P/T)	Certificate	2 years	FT/PT
	Incomplete	JSS Academy	Level 4 Diploma in Electrical and Electronic Engineering (F/T & P/T)	Certificate	?	FT/PT
	Qualifying	JSS Academy	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering (F/T & P/T)	Diploma	?	FT/PT
	Incomplete	Vocational Training Institute	Level 3 Diploma in Engineering – Electrical and Electronic	Certificate	2 years	Full-time
	Qualifying	MITD	National Diploma In Applied Electrical And Electronic Engineering	Diploma	2/3 years	FT/PT
	Qualifying	MITD	Higher National Diploma In Electrical & Electronics Engineering	Diploma	2/3 years	FT/PT

TECHNICIAN – LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Electrotechnician	Qualifying	MITD	Brevet De Technicien (Bt) En Electrotechnique - (Electrotechnics)	Diploma	3 years	Full-time
	Qualifying	JSS Academy	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering (F/T & P/T)	Diploma	?	FT/PT
	Qualifying	JSS Academy	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering (F/T & P/T)	Diploma	?	FT/PT
	Qualifying	JSS Academy	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering (F/T & P/T)	Diploma	?	FT/PT
	Qualifying	Vocational Training Institute	Level 3 Diploma in Engineering – Electrical and Electronic	Diploma	2 years	Full-time
Food technician	Qualifying	University of Mauritius	BSc (Hons) Nutritional Sciences	Bachelor's Degree	3 years	Full-time
	Qualifying	University of Mauritius	BSc (Hons) Food Science and Technology	Bachelor's Degree	3 years	Full-time
	Incomplete	University of Mauritius	BSc (Hons) Applied Biochemistry	Bachelor's Degree	3 years	Full-time
Maintenance Technician	Qualifying	MITD	Industrial Machine Maintenance NC3	Certificate	1 year	Full-time
	Qualifying	MITD	Industrial Machine Maintenance NC4	Certificate	2400 hours	Full-time
	Qualifying	College Technique St Gabriel	Industrial Machine Maintenance	Certificate	?	?
Mechanical Technician	Qualifying	Université des Mascareignes	Diploma in Electromechanical and Automation Engineering	Diploma	2 years	Full-time

TECHNICIAN – LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Offset technician	Qualifying	MITD	Pre-Press NC Level 3	Certificate	1 year	Apprentice Scheme
	Incomplete	University of Mauritius	Printing Techniques	Non-award	3 months	Part-time
Postpress technician	Qualifying	MITD	Print Finishing NC Level 3	Certificate	1 year	Apprentice Scheme
	Incomplete	University of Mauritius	Printing Techniques	Non-award	3 months	Part-time
Refrigeration/Air conditioning technician	Qualifying	MITD	Refrigeration And Air Conditioning NC4	Certificate	2400 hours	Full-time
	Qualifying	Vocational Training Institute	Level 2 Diploma in Engineering – Electrical and Electronic Tech* including Plumbing and Air conditioning /Refrigeration & / NC 4 MITD	Diploma	2 years	Full-time

OTHER PRODUCTION – COURSE STATUS

Post	Course Status	University of Mauritius	Université des Mascareignes	University of Technology	MITD	College Technique St Gabriel	Others
Production Supervisor	Qualifying	✔					
Machine operator	Not found						

- Only production supervisor has a qualifying course which is met by a recently launched course by University of Mauritius in collaboration with MEXA
- As for Machine operators, no specific training exists, and they are trained as per the needs of the production chain

OTHER PRODUCTION – LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Production Supervisor	**Qualifying**	University of Mauritius w/ MEXA	Diploma in Industrial Engineering and Operations Management	Diploma	3 years	Full-time

PRIORITY 2

CRAFTSPERSON - COURSE STATUS

Post	Course Status	MITD	College Technique St Gabriel	JSS Academy	Vocational Training Institute
Plumber	Qualifying	✓			
Welder	Qualifying	✓	✓		
Plumbing supervisor	Not found				
Carpenters	Qualifying	✓			
Fiberglass worker	Not found				
Turner welder	Incomplete	✓			
Turner	Not found				

- Out of 7 posts, 3 were not found while 3 are qualifying and 1 is incomplete
- MITD fulfill courses needs among all courses that are found

CRAFTSPERSON – LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Carpenters	Qualifying	MITD	Wood Trades NC Level 3	Certificate	1 year	Apprentice Scheme
Plumber	Qualifying	MITD	Plumbing NC3	Certificate	1 year	Full-time
Turner welder	Incomplete	MITD	Welding NC3	Certificate	1 year	Full-time
	Incomplete	MITD	Advanced Arc Welding	Certificate	65 hours	Part-time
Welder	Qualifying	MITD	Welding NC3	Certificate	1 year	Full-time
	Incomplete	MITD	Advanced Arc Welding	Certificate	65 hours	Part-time
	Qualifying	College Technique St Gabriel	Welding	Certificate	?	?

LOGISTICS – COURSE STATUS

Post	Course Status	MITD	Polytechnics Mauritius	University of Technology	Curtin University	LM Institute	Open University of Mauritius	Honoris Education Network	Freight Academy	Middlesex University
Driver	Not found									
Forklift Driver	Qualifying	✓								
Store keeper	Incomplete					✓			✓	
Store helper	Not found									
Lorry Driver	Qualifying	✓								
Lorry Helper	Not found									
Clearing and forwarding	Qualifying		✓			✓				
Export coordinator	Qualifying		✓			✓				
Purchasing officer	Qualifying			✓	✓		✓	✓		✓
Sourcing specialist	Qualifying			✓	✓		✓	✓		✓

- Out of 10 Logistics posts, 6 find qualifying courses while 1 is incomplete
- Purchasing officer and Sourcing specialist seem to find more institutions (5) providing qualifying courses

LOGISTICS - LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Clearing and forwarding	Qualifying	LM Institute	National Certificate in Shipping & Freight Forwarding	Certificate	1.5 years	?
	Qualifying	LM Institute	National Certificate in Customs Clearance	Certificate	1.5 years	?
	Qualifying	Polytechnics Mauritius	Diploma in Industrial Logistics	Diploma	3 years	Full-time
Export coordinator	Qualifying	LM Institute	National Certificate in Shipping & Freight Forwarding	Certificate	1.5 years	?
	Qualifying	LM Institute	National Certificate in Customs Clearance	Certificate	1.5 years	?
	Qualifying	Polytechnics Mauritius	Diploma in Industrial Logistics	Diploma	3 years	Full-time
Forklift Driver	Qualifying	MITD	?	?	?	?
Lorry Driver	Qualifying	MITD	?	?	?	?
Purchasing officer	Qualifying	Curtin University	Bcom Logistics and Supply Chain Management and Marketing	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	Bcom Logistics And Supply Chain Management	Bachelor's Degree	3 years	Full-time
	Qualifying	University of Technology	BSc (Hons) in Logistics and Transport Management	Bachelor's Degree	3/4 years	FT/PT
	Qualifying	Middlesex University	BA Hons - Supply Chain and Logistics	Bachelor's Degree	3 years	Full-time
	Qualifying	Open University of Mauritius	CILT(UK) Level 5 Professional Diploma in Logistics and Transport (HL)	Diploma	460 hours	Distance learning
	Qualifying	Honoris Education Network	Higher Certificate in Supply Chain Management	Certificate	1 year	Distance learning
Sourcing Specialist	Qualifying	Curtin University	Bcom Logistics And Supply Chain Management	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	Bcom Logistics and Supply Chain Management and Marketing	Bachelor's Degree	3 years	Full-time
	Qualifying	University of Technology	BSc (Hons) in Logistics and Transport Management	Bachelor's Degree	3/4 years	FT/PT
	Qualifying	Middlesex University	BA Hons - Supply Chain and Logistics	Bachelor's Degree	3 years	Full-time
	Qualifying	Open University of Mauritius	CILT(UK) Level 5 Professional Diploma in Logistics and Transport (HL)	Diploma	460 hours	Distance learning
	Qualifying	Honoris Education Network	Higher Certificate in Supply Chain Management	Certificate	1 year	Distance learning
Store keeper	Incomplete	Freight Academy	Excellence in Warehousing Management	Non-award	27.5 hours	?
	Incomplete	LM Institute	Logistics & Warehouse Management	Non-award	30 hours	?

PRIORITY 3

SALES/MARKETING – COURSE STATUS

Post	Course Status	University of Mauritius	Université des Mascareignes	Curtin University	Curtin University	Rushmore Business School	Institute of Marketing & Management	Open University of Mauritius	MCCI Business School	Others
Sales Representative	Qualifying		✓							
Digital marketer	Qualifying	✓	✓	✓						✓
Merchandiser	Not found									
Business developer	Not found									
Sales supervisor	Not found									
Community Social Media manager	Qualifying			✓	✓					
Content marketer	Qualifying				✓					
Brand Officer/ Coordinator	Qualifying	✓	✓			✓	✓	✓	✓	✓
Marketing officer/ Coordinator	Qualifying	✓	✓			✓	✓	✓	✓	✓

- 6 out of 9 Sales/Marketing posts found qualifying courses
- Brand Officer/Coordinator and Marketing Officer/Coordinator more easily find qualifying courses as the requirement for these posts are generally a degree in Marketing

SALES/MARKETING – LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Brand Officer/Coordinator Marketing officer/Coordinator	Qualifying	Curtin University	Bcom Marketing	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	Bcom Management and Marketing	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	Bachelor of Communications - Corporate Screen Communication & Marketing Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Rushmore Business School	CIM - Foundation Certificate in Professional Marketing	Certificate	6 months	FT/PT
	Qualifying	Rushmore Business School	CIM - Certificate in Professional Marketing	Certificate	6 months	FT/PT
	Qualifying	Rushmore Business School	CIM - Diploma in Professional Marketing	Diploma	1 year	FT/PT
	Qualifying	University of Mauritius	BSc (Hons) Marketing with Digital Technologies	Bachelor's Degree	3 years	Full-time
	Qualifying	Open University of Mauritius	BSc (Hons) Marketing Management	Bachelor's Degree	3 years	?
	Qualifying	MCCI Business School	BTS Management Commercial Opérationnel (Marketing)	Diploma	?	?
	Qualifying	Institute of Marketing & Management	CIM - Foundation Certificate in Professional Marketing	Certificate	6 months	FT/PT
	Qualifying	Institute of Marketing & Management	CIM - Certificate in Professional Marketing	Certificate	6 months	FT/PT
	Qualifying	Université des Mascareignes	BSc (Hons) Marketing	Bachelor's Degree	3 years	Full-time
	Qualifying	Université des Mascareignes	Diploma in Marketing	Diploma	2/3 years	FT/PT
	Qualifying	Université des Mascareignes	Diploma in Marketing	Diploma	2/3 years	FT/PT
	Qualifying	Honoris Education Network	BCom Marketing Management	Bachelor's Degree	3 years	Distance learning
	Qualifying	LM Institute	Diploma in Marketing	Diploma	1 year	Part-time
	Qualifying	Amity Global Business School	BA (Hons) Advertising & Digital Marketing	Bachelor's Degree	3 years	Full-time

SALES/MARKETING – LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Community Social Media Manager	Qualifying	Curtin University	B Communications - Corporate Screen Communication & Graphic Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	B Communications - Web Media & Corporate Screen Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	B Communications - Web Media & Corporate Screen Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	B Communications - Web Media & Graphic Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	B Communications - Web Media & Marketing Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	University of Mauritius	BSc (Hons) Marketing with Digital Technologies	Bachelor's Degree	3 years	Full-time
Content Marketer	Qualifying	Curtin University	B Communications - Corporate Screen Communication & Marketing Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	B Communications - Web Media & Corporate Screen Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	B Communications - Web Media & Corporate Screen Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	B Communications - Web Media & Graphic Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	B Communications - Web Media & Marketing Communication	Bachelor's Degree	3 years	Full-time

SALES/MARKETING – LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Digital Marketer	Qualifying	DoraCrea	Certified Digital Marketing Professional	Certificate	?	Distance learning
	Qualifying	Wisdom in Tech	Digital Marketing	?	?	?
	Qualifying	University of Mauritius	MSc Digital Marketing	Master's Degree	2 years	FT/PT
	Qualifying	Curtin University	B Communications - Corporate Screen Communication & Marketing Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	B Communications - Web Media & Marketing Communication	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	Bcom Marketing	Bachelor's Degree	3 years	Full-time
	Qualifying	Curtin University	Bcom Management and Marketing	Bachelor's Degree	3 years	Full-time
	Qualifying	Université des Mascareignes	BSc (Hons) Marketing	Bachelor's Degree	3 years	Full-time
	Qualifying	Amity Global Business School	BA (Hons) Advertising & Digital Marketing	Bachelor's Degree	3 years	Full-time
	Qualifying	University of Mauritius	BSc (Hons) Marketing with Digital Technologies	Bachelor's Degree	3 years	Full-time
Sales representative	Qualifying	Université des Mascareignes	Diploma in Marketing	Diploma	2/3 years	FT/PT

ADMIN – COURSE STATUS

Post	Course Status	University of Mauritius	Université des Mascareignes	University of Technology	Curtin University	Rushmore Business School	Open University of Mauritius	Others
Administrative clerk/officer	Incomplete							✓
Accountant	Qualifying	✓	✓	✓	✓	✓	✓	✓
Accounting officer	Qualifying	✓	✓	✓	✓	✓	✓	✓
Administrative assistant	Incomplete							✓
Secretary	Incomplete							✓

- Accounting post easily find qualifying courses that are offered by several institutions
- Administrative posts tend not to find qualifying courses, but instead courses that focuses on developing specific skills
- The nature of those courses being non-award lends them the incomplete status

ADMIN – LIST OF COURSES

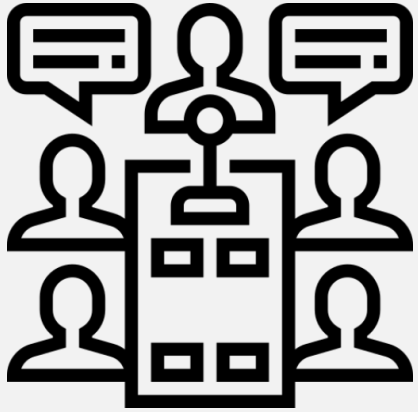
Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Accountant	Qualifying	Curtin University	Bcom Accounting & Finance	Bachelor's Degree	3 years	Full-time
	Qualifying	Université des Mascareignes	Diploma in Accounting and Finance	Diploma	2-3 years	FT/PT
	Qualifying	Université des Mascareignes	BSc (Hons) Accounting and Finance	Bachelor's Degree	3 years	Full-time
	Qualifying	Amity Global Business School	BSc (HONS) Accounting & Finance	Bachelor's Degree	3 years	Full-time
	Qualifying	Middlesex University	Accounting and Finance (BA Hons)	Bachelor's Degree	3 years	Full-time
	Qualifying	Open University of Mauritius	BA (Hons) Business Accounting and Finance	Bachelor's Degree	4 years	FT/PT
	Qualifying	University of Mauritius	BSc (Hons) Accounting (Minor: Finance)	Bachelor's Degree	3 years	Full-time
	Qualifying	University of Mauritius	BSc (Hons) Accounting (Minor: Management)	Bachelor's Degree	3 years	Full-time
	Qualifying	University of Mauritius	BSc (Hons) Accounting (Minor: Business Informatics)	Bachelor's Degree	3 years	Full-time
	Qualifying	Rushmore Business School	ACCA	-	-	FT/PT
	Qualifying	FinanceMU THR Benee School of Accountancy Ltd	ACCA	-	-	FT/PT
	Qualifying	University of Technology	BSc (Hons) Accounting with Finance	Bachelor's Degree	3/4 years	FT/PT
	Qualifying	Stephen Business School	ACCA	-	-	FT/PT
	Qualifying	Sheffield School of Accountancy and Business	ACCA	-	-	FT/PT
	Qualifying	Honoris Education Network	Bachelor in Commerce (BCom) Accounting	Bachelor's Degree	3 years	Distance learning
	Qualifying	London College of Accountancy	ACCA	-	-	FT/PT
	Qualifying	Elite Business School	ACCA	-	-	FT/PT

ADMIN – LIST OF COURSES

Post	Course status	Institution	Course Name	Award Type	Course duration	Format
Administrative assistant	Incomplete	Wisdom in Tech	Administrative & Secretarial Skills	?	?	
	Incomplete	New Secreterial Institute	Office Procedures	Non-award	90 hours	Part-time
Administrative clerk/officer	Incomplete	Wisdom in Tech	Administrative & Secretarial Skills	?	?	
	Incomplete	New Secreterial Institute	Office Procedures	Non-award	90 hours	Part-time
Secretary	Incomplete	Wisdom in Tech	Administrative & Secretarial Skills	?		
	Incomplete	New Secreterial Institute	Receptionist	Non-award	?	Part-time
	Incomplete	New Secreterial Institute	Office Procedures	Non-award	90 hours	Part-time
	Incomplete	New Secreterial Institute	Keyboarding	Non-award	?	Part-time
	Incomplete	New Secreterial Institute	Shorthand	Non-award	?	Part-time

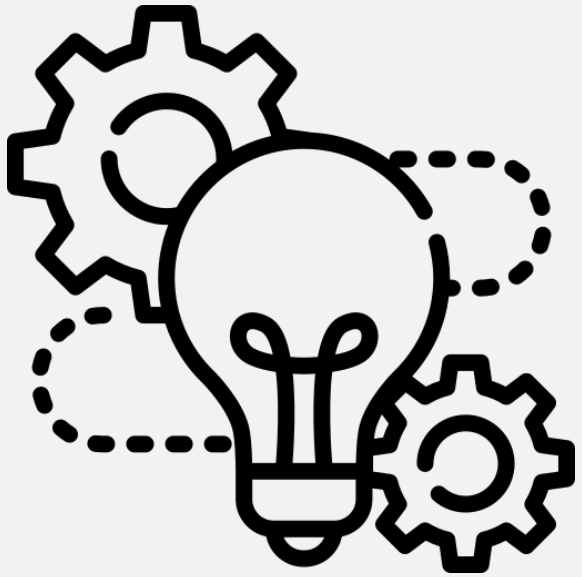
FOCUS GROUP WITH AMM MEMBERS

METHODOLOGY



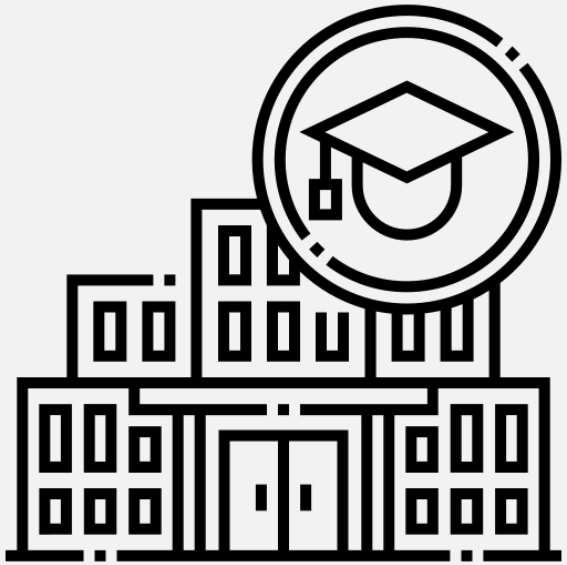
Method	Focus group
Mode	Online conference call
No. of focus groups	2
Target	AMM members
No. of participants per group	8-9
Date	15 December 2021 14 January 2022
Duration	1.5 hours

INCREASE IN SKILL NEEDS TO ADVANCE THE SECTOR



- Members opined that after two years, there is a clear need for skills that will improve and advance the sector
- Those needs are highlighted through two specific ways:
  - **Promoting Research and Development** skillsets – the ability to apply scientific methods to process and product development in the industry
  - **Expanding and better understanding automation needs** – which also includes other technologies such as Internet of Things (IoT) and digitalization which will require training in their own right

DISPARITY AMONG INSTITUTIONS



- Members have highlighted differences between institutions pertaining to machinery, namely:
  - Université des Mascareignes seems to be more updated in terms of equipment
  - University of Mauritius seems to have equipment that is 10 years old and hence largely outdated

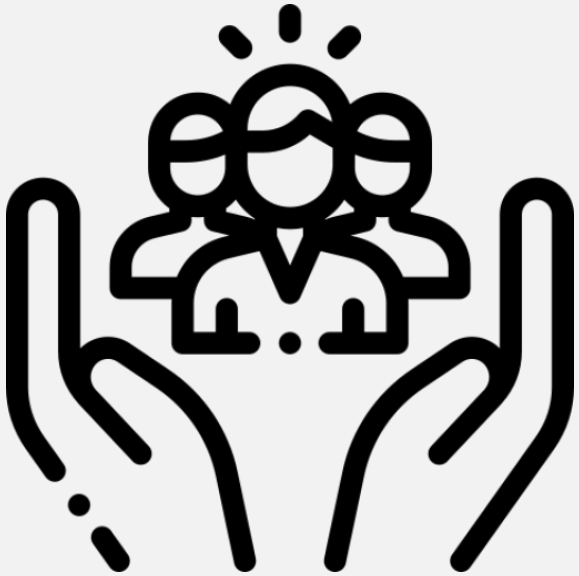
- They highlight the importance of updated equipment in institutions as this may serve to **increase the interest of younger**, more tech-savvy generations towards the manufacturing industry

- Moreover, they highlight inter-faculty discrepancies within some institutions regarding the appropriateness of the training/education provided

FUTURE WORKFORCE WITH DIFFERENT NEEDS

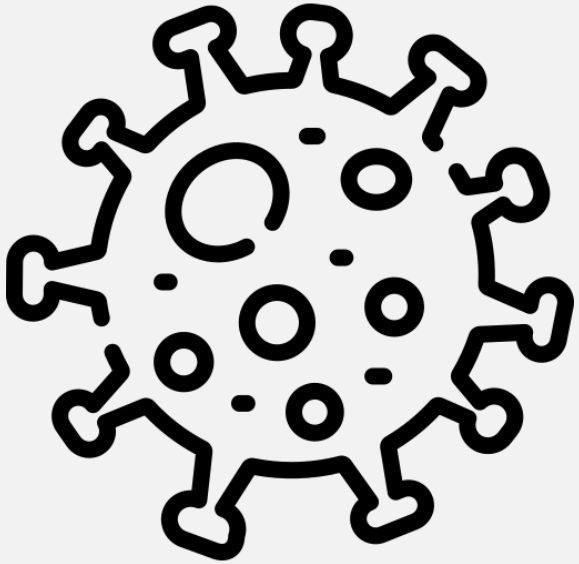
- The results of the study corroborates other studies that indicate that new generations are in search of:
  - **Meaning in their work**
  - **Quality of life on and off the workplace**
- This is expressed through needs for good working environments, good salaries, opportunity for growth, guidance and an unwillingness to work night shifts
- The younger workforce also tends to gravitate towards call centres where they feel better being in a workplace with same age colleagues and a trendier atmosphere
- This is an inevitability, symptomatic of a society which becomes more affluent as seen in more advanced economies

ONUS ON OWNERS/CEOS TO CREATE ATTRACTIVITY



- As such the responsibility to make jobs more attractive and fulfilling to youngsters is **on business owners**
- And as such should also understand that **different individuals may be motivated by different interests**
- The onus is also on businesses and their owners to work towards **increase the attractivity of jobs** withing the manufacturing sector
- UBP has developed their own programme to do so through the transmission of skills from senior to younger staff, which
  - Makes senior staff models worthy of respect in the eyes of younger staff
  - While also having the possibility of having those senior staff as consultants for training new staff after their retirement which further values their skillset

EFFECTS OF COVID

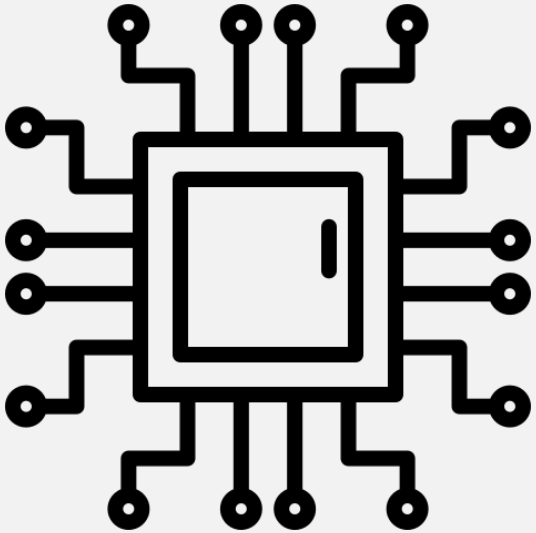


- Covid has had a **stabilizing effect** on employee turnover with the later opting for more security during more difficult times

- New challenges acted like a **trial by fire**:
  - Highlighting the strengths and capabilities of individuals
  - While providing a better understand of the limits of others

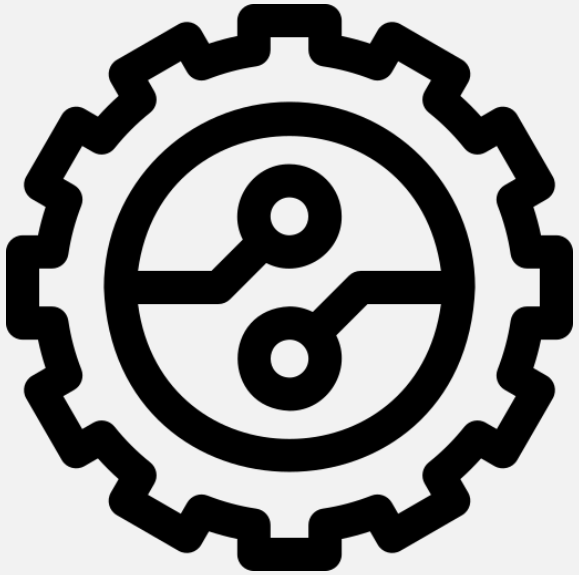
- Covid has also largely accelerated the deployment and use of technology and other innovations

GREATER TECHNOLOGICAL INTEGRATION



- The ability of companies to bring foreign technicians/trainers to commission/maintain machinery and/or train employees was hampered due to Covid
- However, this resulted in an accelerated adoption of **new technologies such as virtual reality and 3D modelling for interventions**
- Moreover, the relevance of technologies such as **automatization, digitalization and IoT** have been highlighted

LABOUR SHIFTS THROUGH TECHNOLOGY



- Technology will penetrate industries further leading to shifts both in skill and in structure
- Skill wise, technician and engineers will likely coalesce with IT, resulting with future iterations of this personnel being programmers too
- Use of automated technologies will require technician to be more tech-savvy
  - The latter tend to fortunately show interest in those technologies and agility in adapting to them
- Structurally, this implies industries of tomorrow are likely to have less personnel, but with few but more highly trained technicians and engineers

PLATFORM EXPECTATIONS

- Act as facilitator and think tank for syndicated projects:
  - Training to address skill needs and upskilling of current staff
  - Negotiation/Working with institutions to adjust syllabi and for better work placement
  - Exchange programmes with foreign institutions to give bring both industry and institutions up to speed on new technologies/processes
  - Leverage know-how of local manufacturers and synergy for the betterment of the industry (e.g., training programmes, employee valorisation programmes, automatization)

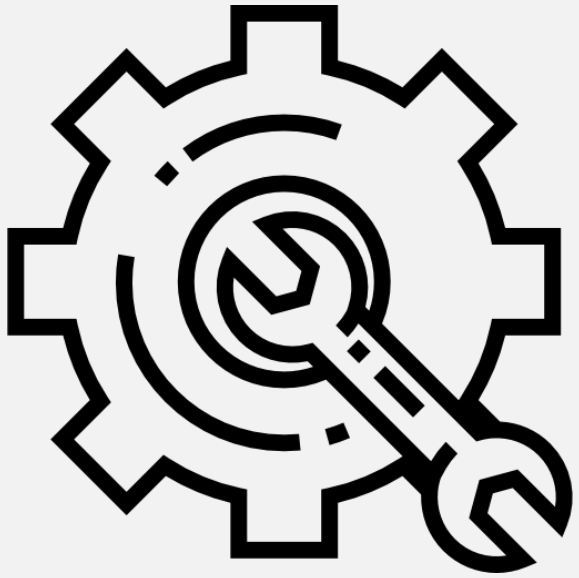
CONCLUSION

TWO MAIN STRATEGIES

Reinforcing Industrial Maintenance as a priority pillar

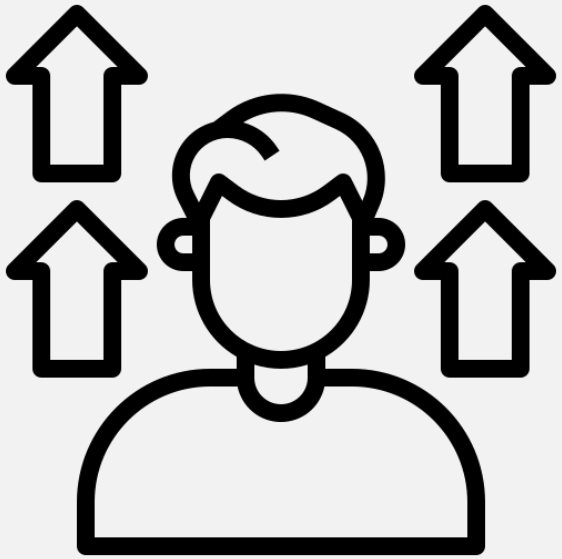
Addressing current shortage for industry's most needed skills

INDUSTRIAL MAINTENANCE AS A PRIORITY PILLAR



- ‘Industrial Maintenance’ is a very important pillar to be reinforced in the industry
- This pillar has likely become skill deficient due to a combination of:
  - A lack of maintenance technicians
  - Specific types of jobs that have evolved
  - Technological evolution
- Training more maintenance technicians to reinforce this pillar would be a **crucial step towards integrating modern technologies** in the industry
- This will also require more personnel who can see the big picture, where currently this is mainly among the top management
- However, if the industry is to be transformed, this will need to be more present among the technical personnel’s hierarchy, **which includes supervisors and middle managers**

UPSKILLING OF CURRENT STAFF



- On the shorter term, the priority would likely be to create a work-study course over 1-2 years for upskilling purposes and integrating modern technologies
- This would target technicians with experience, already knowledgeable with their machinery
- This would result in technicians of supervisory and middle management level who:
  - Will have a clear view of the big picture
  - Contribute to further improving skills within the industry
- The ideal for the long term would be the creation of full fledged 'Maintenance Technician 4.0' courses

LEANING TOWARDS FOREIGN INSTITUTION

- The possibility and/or choice of institutions for this endeavor depends on:
  - Appetence towards partnering with the Association for synergy
  - Qualifications within the institution to develop relevant skills
- Partnerships/exchanges with foreign institutions for the upskilling needs will be considered with the possibility of involvement of local institutions who may also be interested in improving their syllabi through this exchange

MAINTENANCE: AVAILABLE AND PLANNED COURSES

N°	Level (enterprise / sectoral)	Job Title	Training Title	Occupational level	Training level	Duration of training	Training provided by		Actual Capacity
							Locally	Foreign	
1	Sectoral (SSDS project)	Maintenance Technician	BEP in Maintenance Technician	No requirement to access	BEP / NC3	2 years - With 8-10 weeks of work experience	St Gabriel		40 (20 per year)
2	Sectoral (SSDS project)	Maintenance Technician	NC3 in Maintenance Technician	Minimum 16 years old Form III	NC3	1 year	MITD		17
	Sectoral (SSDS project)	Maintenance Technician	NC4 in Maintenance Technician	NTC 3/NC 3 in Engineering Field	NC4	Full time training of 1 year	MITD		17
3	Maintenance Technician 4.0	Manager / Technician in New Technologies	Diploma in new technologies	Post graduate diploma	TBD	Part time - To Be Defined	UDM / UoM / MITD ?	TBD	TBD

- Three courses, 2 by MITD and 1 by College St Gabriel, have been identified with respect to training more maintenance technicians for the industry
- Challenges are in defining whether and how courses' syllabi need to be upgraded or if there are possibilities in increasing their capacity
- Needs regarding Maintenance Technician 4.0 are likely to be met through a 'Diploma in new technologies' which details will be subject of discussion and development in the near future

ADDRESSING CURRENT SHORTAGE FOR INDUSTRY'S MOST NEEDED SKILLS

N°	Level (enterprise / sectoral)	Job Title	Training Title	Occupational level	Training level	Duration of training	Training provided by		Actual Capacity
							Locally	Foreign	
4	Sectoral (SSDS project)	Supervisors & Middle-managers	Leadership Challenge Programme	Technician	TBD	1 Year - Part time 2 days per month	CTI		> 12
5	Sectoral (SSDS project)	Electrician	Diploma in Electrical Engineering and Automation	Technician	Diploma	Full time training of 1 year	UDM		12
6	Sectoral (SSDS project)	Electrician	National Diploma In Applied Electrical And Electronic Engineering	Technician	Diploma	Full time training of 1 year	MITD		17
7	Sectoral (SSDS project)	Electrician	Higher National Diploma In Electrical & Electronics Engineering	Technician	Diploma	Full time training of 1 year	MITD		15
8	Sectoral (SSDS project)	Electrician	NC3 in Engineering - Electrical and Electronic Engineering	Technician	NC3	Full time training of 1 year	JSS Academy & VTI		TBD
	Sectoral (SSDS project)	Electrician	NC4 in Engineering - Electrical and Electronic Engineering	Technician	NC4	Full time training of 1 year	JSS Academy		TBD
	Sectoral (SSDS project)	Electrician	NC5 in Engineering - Electrical and Electronic Engineering	Technician	NC5	Full time training of 1 year	JSS Academy		TBD
9	Sectoral (SSDS project)	Mechanical Technician	Diploma in Electromechanical and Automation Engineering	Technician	Diploma	Full time training of 1 year	UDM		12
10	Sectoral (SSDS project)	Electrotechnician	Diploma in Electrical Engineering and Automation	Technician	Diploma	Full time training of 1 year	UDM		12
11	Sectoral (SSDS project)	Electrotechnician	National Diploma In Applied Electrical And Electronic Engineering	Technician	Diploma	Full time training of 1 year	MITD		17
12	Sectoral (SSDS project)	Electrotechnician	Higher National Diploma In Electrical & Electronics Engineering	Technician	Diploma	Full time training of 1 year	MITD		15
13	Sectoral (SSDS project)	Electrotechnician	NC3 in Engineering - Electrical and Electronic Engineering	Technician	NC3	Full time training of 1 year	JSS Academy & VTI		TBD
	Sectoral (SSDS project)	Electrotechnician	NC4 in Engineering - Electrical and Electronic Engineering	Technician	NC4	Full time training of 1 year	JSS Academy		TBD
	Sectoral (SSDS project)	Electrotechnician	NC5 in Engineering - Electrical and Electronic Engineering	Technician	NC5	Full time training of 1 year	JSS Academy		TBD
14	Sectoral (SSDS project)	Automation Manager	BSc in Electrical Engineering and Automation	Manager	Degree	Full time training of 3 years	UDM		12
15	Sectoral (SSDS project)	Automation Manager	BEng Electrical and Electronic Engineering	Manager	Degree	Full time training of 4 years	UDM / UoM		TBD

- Courses have also been identified for the other 4 top skill needs to address
- In addition, a course for training supervisor and middle managers among technicians is also planned

APPENDIX –
PRIORITY I COURSES
MODULE COMPARISONS

DEGREE LEVEL

MICROBIOLOGIST

Institution	University of Mauritius				
Course	🟠 **BSc (Hons) Agricultural Science and Technology**	🟠 **BSc (Hons) Crop Technology (Minor: Sheltered Farming)**	🟠 **BSc (Hons) Applied Biochemistry**	🟠 **BSc (Hons) Food Science and Technology**	🟠 **BSc (Hons) Biological Sciences**
Duration/Mode	3.5 years/Full-time	3.5 years/Full-time	3.5 years/Full-time	3.5 years/Full-time	3 years/Full-time
Most relevant modules	Microbiology	Microbiology	Basic Microbiology and Techniques	Basic Food Microbiology	Microbiology
					Advanced Microbiology
					Food and Industrial Microbiology
	Data Handling and Research Methodology	Data Handling and Research Methodology	Biotechniques and Analytical Methods		Research Methods
	Experimental Designs and Sampling Techniques	Experimental Designs and Sampling Techniques	Introductory Statistics	Introductory Statistics	
			Statistical Methods and Computational Biology	Statistical Methods for Food Scientists	
Soft skills	Effective Scientific Communication: Principles and Practice I	Effective Scientific Communication: Principles and Practice I	Scientific Communication Skills & Methods	Effective Scientific Communication: Principles and Practice I	
	Effective Scientific Communication: Principles and Practice II	Effective Scientific Communication: Principles and Practice II		Effective Scientific Communication: Principles and Practice II	
		Entrepreneurship & Innovations for Agribusiness			
Other Commonalities	Biochemistry and Biotechnology	Biochemistry and Biotechnology	Biochemistry Fundamentals	Biochemistry and Nutrition	Biochemistry
			Food Biochemistry and Enzymology		
			Protein Biochemistry		
			Clinical Biochemistry		
			Applied Food Biochemistry		
			Medical Biochemistry		
			Environmental Biochemistry		

Legend 🟢 Qualifying 🟠 Incomplete

SOIL BIOLOGIST

Institution	University of Mauritius	
Modules	● BSc (Hons) Agricultural Science and Technology	● BSc (Hons) Crop Technology (Minor: Sheltered Farming)
Duration/Mode	3.5 years/Full-time	3.5 years/Full-time
Most relevant modules	Agricultural Chemistry and Soil Science	Agricultural Chemistry and Soil Science
	Biochemistry and Biotechnology	Biochemistry and Biotechnology
	Botany and Plant Physiology	Botany and Plant Physiology
	Plant Pests, Diseases and Weeds	Plant Pests, Diseases and Weeds
	Emerging Crop Production Technologies	
	Agronomy and Sustainable Horticulture	Agronomy and Sustainable Horticulture
		Crop Nutrition and Fruit Production
		Crop Propagation and Nursery Management
		Crop Biodiversity and Conservation
	Data Handling and Research Methodology	Data Handling and Research Methodology
	Experimental Designs and Sampling Techniques	Experimental Designs and Sampling Techniques
Soft skills	Effective Scientific Communication: Principles and Practice I	Effective Scientific Communication: Principles and Practice I
	Effective Scientific Communication: Principles and Practice II	Effective Scientific Communication: Principles and Practice II
		Entrepreneurship & Innovations for Agribusiness
Other Commonalities	Agrometeorology and Climate Change	Agrometeorology and Climate Change
	Economics of the Agrifood Sector	Economics of the Agrifood Sector
	Principles and Applications of Agricultural Engineering	Principles and Applications of Agricultural Engineering
	Microbiology	Microbiology

Legend ● Qualifying ● Incomplete

MECHATRONICS ENGINEER

Institutions	University of Mauritius		
Course	BEng (Hons) Mechatronics Engineering		
Duration/Mode	4 years/Full-time		
Mechanical	Mechanics of Materials & Machines I	**Others**	Measurement & Control
	Mechanics of Materials & Machines II		Reliability & Safety Engineering
	Thermofluids		Engineering Graphics and Computer Aided Drafting
	Mechanical Processing of Materials		Engineering Design
	Mechanical Vibration		Analytical Techniques
	Electromechanical Systems		Project Appraisal Techniques
Electrical & Electronics	Electrical Energy Systems		Engineering Management I
	Electrical Technology		Engineering Management II
	Electronics		Professional Communications
	Microprocessors		
	Signals and Systems		
	Power Electronic Devices & Converters		
	Digital Signal Processing		
	Automotive Electronics Systems		
	Power Systems		
	Power Electronic Drives		
	Drives and Controls		
	Control Engineering I		
	Control Engineering 2		
Mathematics	Mathematics I		
	Mathematics 2		
Programming	Programming Techniques I		
	Programming Techniques 2		
	Robotics & Machine Intelligence		
	Factory Automation		

Legend Qualifying Incomplete

AGRONOMIST

Institutions	University of Mauritius
Course	MSc Agronomy
Duration/Mode	2 years/Full-time
Crop Technology and Soil Science	Principles and Techniques of Agronomy and Soil Science
	Integrated Pest, Disease and Weed Management
	Irrigation and Water Stress Management
	Agricultural Field Experiments
	Applied Crop Physiology and Botany
	Crop Improvement and Biotechnology Tools
	Postharvest Technology for Agronomy
	Sheltered Farming and Hydroponics
	Internet of Things for Smart Agriculture
Soft Skills	Work Ethics and Culture
	Entrepreneurship and Value Chain Analysis
	Crop Production Enterprises
	Scientific Research and Communication

Legend Qualifying Incomplete

AUTOMATION ENGINEER (1/5)

Institutions	Université des Mascareignes			University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc (Hons) Electromechanical Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	3 years/ Full-time	4 years/ Full-time
Electronics	Fundamental functions of electronics	Fundamental functions of electronics		
	Basic functions and components of electronics	Basic functions and components of electronics		
	Linear circuits and components	Linear circuits and components		Basic Circuits
				Electronic Circuits
				Circuit Theory
				Electronic System Designs
	Analysis and synthesis of logical systems	Analysis and synthesis of logical systems		Digital Logic
	Optoelectronics / Thermal Physics	Optoelectronics / Thermal Physics		Photovoltaic Solar Energy Systems
	Sensors / EMC	Sensors / EMC		Introductory Optics and Thermodynamics
				Device Electronics
				Microprocessor Organization
				Instrumentation & Measurement I
	Power electronics	Power electronics	Electronique de Puissance	

Legend ● Qualifying ● Incomplete

AUTOMATION ENGINEER (2/5)

Institutions	Université des Mascareignes			University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc (Hons) Electromechanical Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	3 years/ Full-time	4 years/ Full-time
ICT and programmming	Information processing and transmission	Information processing and transmission		
	Algorithms, Programming	Algorithms, Programming		Programming Techniques for Engineers I
				Computer Programming for Engineering Applications II
	Architecture of processing systems	Architecture of processing systems		
	Second order systems, filters	Second order systems, filters		
	Networks	Networks		
	Process supervision and control	Process supervision and control		
	Control systems, Regulation	Control systems, Regulation	L`Instrumentation et la Régulation	
		Control systems		
	Control and command of industrial systems	Control and command of industrial systems	Régulation et Asservissement	
			Productique	
	Data base	Data base		
	Analog Telecommunications	Analog Telecommunications		
	Digital Telecommunications	Digital Telecommunications		Digital Comm. Systems
		Wireless and mobile communication		
		Communications Systems		
	Modeling and control of linear digital systems	Modeling and control of linear digital systems		
	Corrections of continuous linear and digital systems	Corrections of continuous linear and digital systems		
	Introduction to wave propagation	Introduction to wave propagation		
	Wave propagation	Wave propagation		
	Data Acquisition	Data Acquisition		
	SCADA	SCADA		
	Securing Enterprise Network	Securing Enterprise Network		Fundamentals of Computer Networks
		Fieldbus Networks and Industrial Ethernet	Réseaux Industriels	
	Mathematical Tool for Signal Processing	Mathematical Tool for Signal Processing	Traitement des Signaux	Digital Signal Processing
			Informatique	
			Automatismes 1	Automatic Control
			Automatismes 2	
			Automatismes 3	
			Productique	
			Réalisations de Systèmes 1	
			Réalisations de systèmes 2	
				Computer-Aided Logic Design
				Principles of Artificial Intelligence

Legend ● Qualifying ● Incomplete

AUTOMATION ENGINEER (3/5)

Institutions	Université des Mascareignes			University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc (Hons) Electromechanical Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	3 years/ Full-time	4 years/ Full-time
Mathematics	Fundamentals of Algebra and Trigonometry	Fundamentals of Algebra and Trigonometry	Mathématiques 1	
	Fundamental of analytical Mathematics	Fundamental of analytical Mathematics	Mathématiques 2	
			Mathématiques 3	
	Elements of applied mathematics	Elements of applied mathematics		
	Integral calculus and differential equations	Integral calculus and differential equations		Calculus I with Applications
				Calculus II
				Vector Calculus
				Intro. to Ordinary Differential Equations
	Mathematical tools for Fourier analysis	Mathematical tools for Fourier analysis		
	Mathematical tools for discrete signals	Mathematical tools for discrete signals		Discrete Mathematics in Comp. Science
	Analytical Mathematics	Analytical Mathematics		
	Linear algebra and applications	Linear algebra and applications		
		Maths for electrical engineer		Applications for Eng. Mathematics
	Probability and Inferential Statistics	Probability and Inferential Statistics		
	Research and implementation	Research and implementation		
	Research and documentation	Research and documentation		
			Analyse Numérique	
			Métrologie	
Mechanical and Material	Mechanics – Electromagnetism	Mechanics – Electromagnetism	Mécanique 1	Introductory Mechanics
			Mécanique 2	
			Physique Appliquée 1	
			Thermodynamique	
			Thermodynamique Appliquée au Froid et à la Climatisation	
			Mécaniques des fluides	
			Hydraulique Industrielle	
			Mechanical System Design	
			Technologie des moteurs à combustion interne	
			Pneumatique Industrielle	
			Étude des Parties Opératives 1	
			Étude des Parties Opératives 2	
			Etude des Parties Opératives 3	
			Science des Matériaux	
				General Chemistry I (with Lab)

Legend ● Qualifying ● Incomplete

AUTOMATION ENGINEER (4/5)

Institutions	Université des Mascareignes			University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc (Hons) Electromechanical Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	3 years/ Full-time	4 years/ Full-time
Electrical	Inductors and transformers	Inductors and transformers		
	DC machines and rectification	DC machines and rectification		
	Converters	Converters		
	AC machines	AC machines		
	Electrical distribution	Electrical distribution		
	Distribution and security	Distribution and security		
	Semiconductor	Semiconductor		
	Power Systems	Power Systems		
	Engineering Management	Engineering Management		
			Électrotechnique 1	
			Électrotechniques 2	
	Renewable Energies	Renewable Energies	Renewal and Sustainable Energy	
				Introductory Electricity and Magnetism
				Introductory Electromagnetics
		Electromagnetic Field and Waves and Antenna Theory		
		Overvoltages and Insulation		
Maintenance			Ingénierie de la Maintenance 1	
			Ingénierie de la Maintenance 2	
			Maintenance Basée sur la Fiabilité 1	
			Maintenance Basé sur la Fiabilité 2	
			Pratique de la FMDS	

Legend ● Qualifying ● Incomplete

AUTOMATION ENGINEER (5/5)

Institutions	Université des Mascareignes			University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc (Hons) Electromechanical Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	3 years/ Full-time	4 years/ Full-time
Soft Skills	English	English	Techniques d`Expression en Anglais 1	English Composition I
	General and professional English communication	General and professional English communication		English Composition II
			Techniques d`Expression en Français 1	
			Techniques d`Expression en Français 2	
	Communication skills	Communication skills		Intro. To Communications
	Written and oral skills	Written and oral skills		
				Succeeding as a Global Wildcat
				Succeeding as a Global Professional
				Cross-disciplinary Design A
				Cross-disciplinary Design B
General Education Module	Human, economic and social science	Human, economic and social science	Economie, Organisation et Gestion	Contemporary Society and Development
	Introduction to Finance	Introduction to Finance	Economie et Finance en ingénierie	Introduction to Psychological Science
				History of Mauritius
				Understanding the World of Commerce
				Anthropology of Indian Ocean Societies
			Hygiène, Sécurité et Environnement	Engineering Ethics
				Sustainable Development Practices

Legend ● Qualifying ● Incomplete

PRODUCT DEVELOPER

Institutions	University of Mauritius
Courses	BSc (Hons) Sustainable Product Design
Duration/Mode	3 years/Full time
Design	Product Ideation and Digital Imaging
	Creativity and Innovation
	Computer Aided Design
	Design Philosophy
	IT Tools and Applications
	Virtual Design and 3D Modelling
	Sustainable Product Design & Prototyping
Manufacturing	Materials I
	Materials II
	Quality Concept
	Product Manufacturing Processes
Sustainability	Sustainability Standards & Auditing Processes
	Climate Change & Sustainable Livelihoods
	Pathways to Sustainability
Management	Fundamentals of Entrepreneurship
	Principles and Practice of Management
	Business Planning and Development
	Start-Up Fundamentals

Legend Qualifying Incomplete

FORMULATOR

Institutions	University of Mauritius		Polytechnics Mauritius
Courses	🟢 BSc (Hons) Food Science and Technology	🟠 BSc (Hons) Biological Sciences	🟠 Diploma in Pharmacy
Duration/Mode	**3 years/Full time**	**3 years/Full time**	
Most relevant	Basic Food Microbiology	Food and Industrial Microbiology	
		Microbiology	Basic Microbiology
		Advanced Microbiology	Pharmaceutical Microbiology
	Biochemistry and Nutrition	Biochemistry	Biochemistry
			Basic Formulation
	Food Chemistry and Food Analysis I		
	Food Chemistry and Food Analysis II		
	Basic Food Engineering		
	Food Processing		
	Sensory Analysis		
	Food Product Development		
	Molecular Biology	Molecular Biology I	
		Molecular Biology II	
			Basic Pharmacology
			Systemic Pharmacology
			Autonomic Pharmacology
			Analytical Pharmaceutical Chemistry
			Applied Pharmacology
Soft skills	Introductory Statistics	Research Methods	Introduction to Research Methodology
	Statistical Methods for Food Scientists		
	Effective Scientific Communication: Principles and Practice I		
	Effective Scientific Communication: Principles and Practice II		
			Business French
			Business English
			Professional Ethics
			Dispensing Technique and Communication
			Introduction to Entrepreneurship
			Introduction to Information Communication Technology

Legend 🟢 Qualifying 🟠 Incomplete

Note: Formulators apply to different industries including but not limited to Food, Cosmetics, Pharmaceuticals. Given that in this case, only the food sector seems to have a qualifying industry, it was more appropriate to consider it overall as being incomplete.

ROBOTICS ENGINEER

Institutions	Université des Mascareignes
Courses	Master Artificial Intelligence and Robotics
Duration/Mode	2.5 years/Part time
Mathematics	Maths for AI
	Maths
Programming & AI	Programming languages for AI
	Embedded Programming
	Algorithm for Artificial Intelligence
	Machine Learning
	Evolutionary / Bioinspired Algorithm
	Multi Agents Systems / Distributed AI
	Neural Networks and Deep Learning
	Big Data and Data Mining
Robotics	Signal Processing
	Control Systems 1
	Control systems 2
	Industrial Robotics
	Perception and Mobile Robotics
	Advanced Tools for AI and Robotics
Peripheral Modules	Networking and Security
	Internet of Objects/ Web and Mobile
	Digital Image Processing
	Drones and Applications
	Sensors, Data and Localisation
Soft Skills	Entrepreneurship- Innovation
	Research methodology
	Project Management and Quality
	Communication and Scientific Publication
	Organising Conferences
	Ethics and law

Legend Qualifying Incomplete

INDUSTRIAL ENGINEER

Institutions	University of Mauritius		
Course	🟢 BEng (Hons) Mechanical Engineering (Minor: Industrial Systems)		
Duration/Mode	2.5 years/Part time		
Mathematics	Mathematics for Engineers 1	**Engineering**	Material Science and Engineering
	Mathematics for Engineers 2		Principles of Electrical Engineering
	Mathematics for Engineers 3A		Control Systems
	Mathematics for Engineers 4A		Thermal and Fluid Machinery
Physics	Physics for Engineers 1		Thermal Engineering
	Physics for Engineers 2	**Design**	Engineering Graphics and CAD
	Introduction to Mechanics		Mechanical Design 1
	Dynamics		Mechanical Design 2
	Thermodynamics 1		Mechanical Design 3
	Thermodynamics 2	**Others**	Experimentation and Investigations
	Structural Mechanics		Environmental Management
	Continuum Mechanics		Numerical Methods and Optimization Techniques in Engineering
	Computational Mechanics	**Soft skills**	Professional Communication for Engineers
	Strength of Materials		IT and Programming Techniques
	Thermofluids 1		Engineering Professionalism
	Thermofluids 2	**General Education**	Contemporary Society and Development
	Vibration and Noise		
Chemistry	Chemistry for Engineers		Sociology for Engineers

Legend 🟢 Qualifying 🟠 Incomplete

INDUSTRIAL IT ENGINEER (1/5)

Institutions	Université des Mascareignes		University of Mauritius
Courses	🟢 BSc (Hons) Electrical Engineering and Automation	🟢 BEng (Hons) Electrical and Electronic Engineering	🟢 BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	4 years/ Full-time
Electronics	Fundamental functions of electronics	Fundamental functions of electronics	
	Basic functions and components of electronics	Basic functions and components of electronics	
	Linear circuits and components	Linear circuits and components	Basic Circuits
			Electronic Circuits
			Circuit Theory
			Electronic System Designs
	Analysis and synthesis of logical systems	Analysis and synthesis of logical systems	Digital Logic
	Optoelectronics / Thermal Physics	Optoelectronics / Thermal Physics	Photovoltaic Solar Energy Systems
	Sensors / EMC	Sensors / EMC	Introductory Optics and Thermodynamics
			Device Electronics
			Microprocessor Organization
			Instrumentation & Measurement I
	Power electronics	Power electronics	

Legend 🟢 Qualifying 🟠 Incomplete

INDUSTRIAL IT ENGINEER (2/5)

Institutions	Université des Mascareignes		University of Mauritius
Courses	🟢 BSc (Hons) Electrical Engineering and Automation	🟢 BEng (Hons) Electrical and Electronic Engineering	🟢 BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	4 years/ Full-time
ICT and programmming	Information processing and transmission	Information processing and transmission	
	Algorithms, Programming	Algorithms, Programming	Programming Techniques for Engineers I
			Computer Programming for Engineering Applications II
	Architecture of processing systems	Architecture of processing systems	
	Second order systems, filters	Second order systems, filters	
	Networks	Networks	
	Process supervision and control	Process supervision and control	
	Control systems, Regulation	Control systems, Regulation	
		Control systems	
	Control and command of industrial systems	Control and command of industrial systems	
	Data base	Data base	
	Analog Telecommunications	Analog Telecommunications	
	Digital Telecommunications	Digital Telecommunications	Digital Comm. Systems
		Wireless and mobile communication	
		Communications Systems	
	Modeling and control of linear digital systems	Modeling and control of linear digital systems	
	Corrections of continuous linear and digital systems	Corrections of continuous linear and digital systems	
	Introduction to wave propagation	Introduction to wave propagation	
	Wave propagation	Wave propagation	
	Data Acquisition	Data Acquisition	
	SCADA	SCADA	
	Securing Enterprise Network	Securing Enterprise Network	Fundamentals of Computer Networks
		Fieldbus Networks and Industrial Ethernet	
	Mathematical Tool for Signal Processing	Mathematical Tool for Signal Processing	Digital Signal Processing
			Computer-Aided Logic Design
			Principles of Artificial Intelligence

Legend 🟢 Qualifying 🟠 Incomplete

INDUSTRIAL IT ENGINEER (3/5)

Institutions	Université des Mascareignes		University of Mauritius
Courses	🟢 BSc (Hons) Electrical Engineering and Automation	🟢 BEng (Hons) Electrical and Electronic Engineering	🟢 BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	4 years/ Full-time
Mathematics	Fundamentals of Algebra and Trigonometry	Fundamentals of Algebra and Trigonometry	
	Fundamental of analytical Mathematics	Fundamental of analytical Mathematics	
	Elements of applied mathematics	Elements of applied mathematics	
	Integral calculus and differential equations	Integral calculus and differential equations	Calculus I with Applications
			Calculus II
			Vector Calculus
			Intro. to Ordinary Differential Equations
	Mathematical tools for Fourier analysis	Mathematical tools for Fourier analysis	
	Mathematical tools for discrete signals	Mathematical tools for discrete signals	Discrete Mathematics in Comp. Science
	Analytical Mathematics	Analytical Mathematics	
	Linear algebra and applications	Linear algebra and applications	
		Maths for electrical engineer	Applications for Eng. Mathematics
	Probability and Inferential Statistics	Probability and Inferential Statistics	
	Research and implementation	Research and implementation	
	Research and documentation	Research and documentation	
Mechanical and Material	Mechanics – Electromagnetism	Mechanics – Electromagnetism	Introductory Mechanics
			General Chemistry I (with Lab)

Legend 🟢 Qualifying 🟠 Incomplete

INDUSTRIAL IT ENGINEER (4/5)

Institutions	Université des Mascareignes		University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	4 years/ Full-time
Electrical	Inductors and transformers	Inductors and transformers	
	DC machines and rectification	DC machines and rectification	
	Converters	Converters	
	AC machines	AC machines	
	Electrical distribution	Electrical distribution	
	Distribution and security	Distribution and security	
	Semiconductor	Semiconductor	
	Power Systems	Power Systems	
	Engineering Management	Engineering Management	
	Renewable Energies	Renewable Energies	
			Introductory Electricity and Magnetism
			Introductory Electromagnetics
		Electromagnetic Field and Waves and Antenna Theory	
		Overvoltages and Insulation	

Legend ● Qualifying ● Incomplete

INDUSTRIAL IT ENGINEER (5/5)

Institutions	Université des Mascareignes		University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	4 years/ Full-time
Soft Skills	English	English	English Composition I
	General and professional English communication	General and professional English communication	English Composition II
	Communication skills	Communication skills	Intro. To Communications
	Written and oral skills	Written and oral skills	
			Succeeding as a Global Wildcat
			Succeeding as a Global Professional
			Cross-disciplinary Design A
			Cross-disciplinary Design B
General Education Module	Human, economic and social science	Human, economic and social science	Contemporary Society and Development
	Introduction to Finance	Introduction to Finance	Introduction to Psychological Science
			History of Mauritius
			Understanding the World of Commerce
			Anthropology of Indian Ocean Societies
			Engineering Ethics
			Sustainable Development Practices

Legend ● Qualifying ● Incomplete

RESEARCH AND DEVELOPMENT

Institution	Université des Mascareignes	
Course	🟠 BSc (Hons) Electrical Engineering and Automation	🟠 BEng (Hons) Electrical and Electronic Engineering
Duration/Mode	4 years/Full time	4 years/Full time
Most relevant	Probability and Inferential Statistics	Probability and Inferential Statistics
	Research and implementation	Research and implementation
	Research and documentation	Research and documentation
Soft Skills	English	English
	General and professional English communication	General and professional English communication
	Communication skills	Communication skills
	Written and oral skills	Written and oral skills
General Education Module	Human, economic and social science	Human, economic and social science
	Introduction to Finance	Introduction to Finance

Legend 🟢 Qualifying 🟠 Incomplete

PROCESS ENGINEER

Institution	University of Mauritius		
Course	🟢 BSc (Hons) Chemical Engineering		
Duration/Mode	4 years/Full time		
Mathematics	Mathematics for Engineers 1	**Process, Control & Management**	Heat Transfer
	Mathematics for Engineers 2		Process Instrumentation
	Mathematics for Engineers 3A		Mass Transfer
	Mathematics for Engineers 4A		Process Control
Physics	Physics for Engineers 1		Chemical Process Safety and Risk Management
	Introduction to Mechanics		Reaction Engineering 1
	Thermodynamics 1		Reaction Engineering 2
	Thermodynamics 2		Chemical Process Technologies
	Chemical Thermodynamics		Quality Systems
	Fluid Mechanics 1		Chemical Process Design and Simulation
	Fluid Mechanics 2		Wastewater Management
Chemistry	Chemistry for Engineers		Industrial Ecology
	Basic Chemical Engineering		Solid Waste Management
	Green Chemistry		Water Pollution Control
	Material Science and Engineering		Design Process
Other engineering	Environmental Engineering		Unit Operations 1
	Renewable Energy Technologies		Unit Operations 2
	Applied Renewable Energy Technologies	**Soft Skills**	Research and Statistical Methods
	Refrigeration and Air Conditioning		Professional Communication for Engineers
	Petrochemical Engineering		Engineering Professionalism
		Other	Sociology for Engineers
			Legal Aspects for Chemical Engineers
			Chemical Engineering Economics

Legend 🟢 Qualifying 🟠 Incomplete

IOT ENGINEER (1/5)

Institutions	Université des Mascareignes		University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	4 years/ Full-time
Electronics	Fundamental functions of electronics	Fundamental functions of electronics	
	Basic functions and components of electronics	Basic functions and components of electronics	
	Linear circuits and components	Linear circuits and components	Basic Circuits
			Electronic Circuits
			Circuit Theory
			Electronic System Designs
	Analysis and synthesis of logical systems	Analysis and synthesis of logical systems	Digital Logic
	Optoelectronics / Thermal Physics	Optoelectronics / Thermal Physics	Photovoltaic Solar Energy Systems
	Sensors / EMC	Sensors / EMC	Introductory Optics and Thermodynamics
			Device Electronics
			Microprocessor Organization
			Instrumentation & Measurement I
	Power electronics	Power electronics	

Legend ● Qualifying ● Incomplete

IOT ENGINEER (2/5)

Institutions	Université des Mascareignes		University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	4 years/ Full-time
ICT and programmming	Information processing and transmission	Information processing and transmission	
	Algorithms, Programming	Algorithms, Programming	Programming Techniques for Engineers I
			Computer Programming for Engineering Applications II
	Architecture of processing systems	Architecture of processing systems	
	Second order systems, filters	Second order systems, filters	
	Networks	Networks	
	Process supervision and control	Process supervision and control	
	Control systems, Regulation	Control systems, Regulation	
		Control systems	
	Control and command of industrial systems	Control and command of industrial systems	
	Data base	Data base	
	Analog Telecommunications	Analog Telecommunications	
	Digital Telecommunications	Digital Telecommunications	Digital Comm. Systems
		Wireless and mobile communication	
		Communications Systems	
	Modeling and control of linear digital systems	Modeling and control of linear digital systems	
	Corrections of continuous linear and digital systems	Corrections of continuous linear and digital systems	
	Introduction to wave propagation	Introduction to wave propagation	
	Wave propagation	Wave propagation	
	Data Acquisition	Data Acquisition	
	SCADA	SCADA	
	Securing Enterprise Network	Securing Enterprise Network	Fundamentals of Computer Networks
		Fieldbus Networks and Industrial Ethernet	
	Mathematical Tool for Signal Processing	Mathematical Tool for Signal Processing	Digital Signal Processing
			Computer-Aided Logic Design
			Principles of Artificial Intelligence

Legend ● Qualifying ● Incomplete

IOT ENGINEER (3/5)

Institutions	Université des Mascareignes		University of Mauritius
Courses	🟢 BSc (Hons) Electrical Engineering and Automation	🟢 BEng (Hons) Electrical and Electronic Engineering	🟢 BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	4 years/ Full-time
Mathematics	Fundamentals of Algebra and Trigonometry	Fundamentals of Algebra and Trigonometry	
	Fundamental of analytical Mathematics	Fundamental of analytical Mathematics	
	Elements of applied mathematics	Elements of applied mathematics	
	Integral calculus and differential equations	Integral calculus and differential equations	Calculus I with Applications
			Calculus II
			Vector Calculus
			Intro. to Ordinary Differential Equations
	Mathematical tools for Fourier analysis	Mathematical tools for Fourier analysis	
	Mathematical tools for discrete signals	Mathematical tools for discrete signals	Discrete Mathematics in Comp. Science
	Analytical Mathematics	Analytical Mathematics	
	Linear algebra and applications	Linear algebra and applications	
		Maths for electrical engineer	Applications for Eng. Mathematics
	Probability and Inferential Statistics	Probability and Inferential Statistics	
	Research and implementation	Research and implementation	
	Research and documentation	Research and documentation	
Mechanical and Material	Mechanics – Electromagnetism	Mechanics – Electromagnetism	Introductory Mechanics
			General Chemistry I (with Lab)

Legend 🟢 Qualifying 🟠 Incomplete

IOT ENGINEER (4/5)

Institutions	Université des Mascareignes		University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	4 years/ Full-time
Electrical	Inductors and transformers	Inductors and transformers	
	DC machines and rectification	DC machines and rectification	
	Converters	Converters	
	AC machines	AC machines	
	Electrical distribution	Electrical distribution	
	Distribution and security	Distribution and security	
	Semiconductor	Semiconductor	
	Power Systems	Power Systems	
	Engineering Management	Engineering Management	
	Renewable Energies	Renewable Energies	
			Introductory Electricity and Magnetism
			Introductory Electromagnetics
		Electromagnetic Field and Waves and Antenna Theory	
		Overvoltages and Insulation	

Legend ● Qualifying ● Incomplete

IOT ENGINEER (5/5)

Institutions	Université des Mascareignes		University of Mauritius
Courses	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering
Duration/Mode	3 years/ Full-time	4 years/ Full-time	4 years/ Full-time
Soft Skills	English	English	English Composition I
	General and professional English communication	General and professional English communication	English Composition II
	Communication skills	Communication skills	Intro. To Communications
	Written and oral skills	Written and oral skills	
			Succeeding as a Global Wildcat
			Succeeding as a Global Professional
			Cross-disciplinary Design A
			Cross-disciplinary Design B
General Education Module	Human, economic and social science	Human, economic and social science	Contemporary Society and Development
	Introduction to Finance	Introduction to Finance	Introduction to Psychological Science
			History of Mauritius
			Understanding the World of Commerce
			Anthropology of Indian Ocean Societies
			Engineering Ethics
			Sustainable Development Practices

Legend ● Qualifying ● Incomplete

CHEMICAL ENGINEER

Institution	University of Mauritius		
Course	BSc (Hons) Chemical Engineering		
Duration/Mode	4 years/Full time		
Mathematics	Mathematics for Engineers 1	**Process, Control & Management**	Heat Transfer
	Mathematics for Engineers 2		Process Instrumentation
	Mathematics for Engineers 3A		Mass Transfer
	Mathematics for Engineers 4A		Process Control
Physics	Physics for Engineers 1		Chemical Process Safety and Risk Management
	Introduction to Mechanics		Reaction Engineering 1
	Thermodynamics 1		Reaction Engineering 2
	Thermodynamics 2		Chemical Process Technologies
	Chemical Thermodynamics		Quality Systems
	Fluid Mechanics 1		Chemical Process Design and Simulation
	Fluid Mechanics 2		Wastewater Management
Chemistry	Chemistry for Engineers		Industrial Ecology
	Basic Chemical Engineering		Solid Waste Management
	Green Chemistry		Water Pollution Control
	Material Science and Engineering		Design Process
Other engineering	Environmental Engineering		Unit Operations 1
	Renewable Energy Technologies		Unit Operations 2
	Applied Renewable Energy Technologies	**Soft Skills**	Research and Statistical Methods
	Refrigeration and Air Conditioning		Professional Communication for Engineers
	Petrochemical Engineering		Engineering Professionalism
		Other	Sociology for Engineers
			Legal Aspects for Chemical Engineers
			Chemical Engineering Economics

Legend Qualifying Incomplete

CHEMIST

Institutions	University of Mauritius
Courses	BSc (Hons) Chemistry
Duration/Mode	**3 years/Full time**
Chemistry	Organic Chemistry I
	Organic Chemistry II
	Organic Chemistry III
	Physical Chemistry I
	Physical Chemistry II and Polymer Chemistry I
	Polymer Chemistry II
	Physical Chemistry III
	Inorganic Chemistry I
	Inorganic Chemistry II
	Inorganic Chemistry III
	Analytical & Environmental Chemistry I
	Analytical Chemistry II
	Environmental Chemistry II
	Selected Topics in Environmental and Analytical Chemistry
	Practical Chemistry I
	Practical Chemistry II
	Maths for Chemists
	Forensic Chemistry I
	Forensic Chemistry II
	Topics in Biochemistry
	Industrial Chemistry
	Supramolecular Chemistry
	Computational Chemistry
Others	Quality Control and Quality Management
	Digital Literacy

Legend Qualifying Incomplete

ELECTRICAL ENGINEER (1/5)

Institutions	Université des Mascareignes		University of Mauritius	
Course	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering	● BEng (Hons) Electrical and Electronic Engineering
Duration/Mode	3 years/Full time	4 years/Full time	4 years/Full time	4 years/Full time
Electronics	Fundamental functions of electronics	Fundamental functions of electronics		
	Basic functions and components of electronics	Basic functions and components of electronics		
	Linear circuits and components	Linear circuits and components	Basic Circuits	Circuits & Systems
			Electronic Circuits	
			Circuit Theory	
			Electronic System Designs	
	Analysis and synthesis of logical systems	Analysis and synthesis of logical systems	Digital Logic	
	Optoelectronics / Thermal Physics	Optoelectronics / Thermal Physics	Photovoltaic Solar Energy Systems	Optoelectronics
	Sensors / EMC	Sensors / EMC	Introductory Optics and Thermodynamics	
			Device Electronics	
			Microprocessor Organization	Microprocessors & Microcontrollers
			Instrumentation & Measurement 1	Instrumentation & Measurement 1
				Instrumentation and Measurement 2
	Power electronics	Power electronics		Power Electronics 1
				Power Electronics 2
				Digital Electronics
				Analog Electronics 1
				Analog Electronics 2
				Electronics Systems Design 1
				Nanoelectronics

Legend ● Qualifying ● Incomplete

ELECTRICAL ENGINEER (2/5)

Institutions	Université des Mascareignes		University of Mauritius	
Course	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering	● BEng (Hons) Electrical and Electronic Engineering
Duration/Mode	3 years/Full time	4 years/Full time	4 years/Full time	4 years/Full time
Computing and programming	Information processing and transmission	Information processing and transmission		
	Algorithms, Programming	Algorithms, Programming	Programming Techniques for Engineers I	Programming Techniques I
			Computer Programming for Engineering Applications II	Programming Techniques 2
	Architecture of processing systems	Architecture of processing systems		
	Second order systems, filters	Second order systems, filters		
	Networks	Networks		
	Process supervision and control	Process supervision and control		
	Control systems, Regulation	Control systems, Regulation		Control Systems I
		Control systems		Control Systems 2
	Control and command of industrial systems	Control and command of industrial systems		
	Data base	Data base		
	Analog Telecommunications	Analog Telecommunications		
	Digital Telecommunications	Digital Telecommunications	Digital Comm. Systems	
		Wireless and mobile communication		
		Communications Systems		
	Modeling and control of linear digital systems	Modeling and control of linear digital systems		
	Corrections of continuous linear and digital systems	Corrections of continuous linear and digital systems		
	Introduction to wave propagation	Introduction to wave propagation		
	Wave propagation	Wave propagation		
	Data Acquisition	Data Acquisition		
	SCADA	SCADA		
	Securing Enterprise Network	Securing Enterprise Network		Fundamentals of Computer Networks
		Fieldbus Networks and Industrial Ethernet	Réseaux Industriels	
	Mathematical Tool for Signal Processing	Mathematical Tool for Signal Processing	Traitement des Signaux	Digital Signal Processing
			Informatique	
			Automatismes I	Automatic Control
			Automatismes 2	
			Automatismes 3	
			Productique	
			Réalisations de Systèmes I	
			Réalisations de systèmes 2	
				Computer-Aided Logic Design
				Principles of Artificial Intelligence

Legend ● Qualifying ● Incomplete

ELECTRICAL ENGINEER (3/5)

Institutions	Université des Mascareignes		University of Mauritius	
Course	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering	● BEng (Hons) Electrical and Electronic Engineering
Duration/Mode	3 years/Full time	4 years/Full time	4 years/Full time	4 years/Full time
Mathematics	Fundamentals of Algebra and Trigonometry	Fundamentals of Algebra and Trigonometry		
	Fundamental of analytical Mathematics	Fundamental of analytical Mathematics		
	Elements of applied mathematics	Elements of applied mathematics		
	Integral calculus and differential equations	Integral calculus and differential equations	Calculus I with Applications	
			Calculus II	
			Vector Calculus	
			Intro. to Ordinary Differential Equations	
	Mathematical tools for Fourier analysis	Mathematical tools for Fourier analysis		
	Mathematical tools for discrete signals	Mathematical tools for discrete signals	Discrete Mathematics in Comp. Science	
	Analytical Mathematics	Analytical Mathematics		
	Linear algebra and applications	Linear algebra and applications		
			Applications for Eng. Mathematics	
		Maths for electrical engineer		
	Probability and Inferential Statistics	Probability and Inferential Statistics		Engineering Probability & Statistics
	Research and implementation	Research and implementation		
	Research and documentation	Research and documentation		
				Engineering Mathematics 1
				Engineering Mathematics 2
				Engineering Mathematics 3

Legend ● Qualifying ● Incomplete

ELECTRICAL ENGINEER (4/5)

Institutions	Université des Mascareignes		University of Mauritius	
Course	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering	● BEng (Hons) Electrical and Electronic Engineering
Duration/Mode	3 years/Full time	4 years/Full time	4 years/Full time	4 years/Full time
Mechanical and Material	Mechanics – Electromagnetism	Mechanics – Electromagnetism	Introductory Mechanics	Physics for Engineers 1
		Electromagnetic Field and Waves and Antenna Theory		
				Physics for Engineers 2
			General Chemistry I (with Lab)	Chemistry
				Material Science
				Thermodynamics
Electrical	Inductors and transformers	Inductors and transformers		
	DC machines and rectification	DC machines and rectification		Electrical Machines
	Converters	Converters		
	AC machines	AC machines		
	Electrical distribution	Electrical distribution		
	Distribution and security	Distribution and security		
	Semiconductor	Semiconductor		
	Power Systems	Power Systems		Power Systems 1
				Power Systems 2
	Engineering Management	Engineering Management		
	Renewable Energies	Renewable Energies		Renewable Energy Systems
			Introductory Electricity and Magnetism	
			Introductory Electromagnetics	Electromagnetics
				Electro-techniques
				Statics
				Electrical Systems Design
		Overvoltages and Insulation		

Legend ● Qualifying ● Incomplete

ELECTRICAL ENGINEER (5/5)

Institutions	Université des Mascareignes		University of Mauritius	
Course	● BSc (Hons) Electrical Engineering and Automation	● BEng (Hons) Electrical and Electronic Engineering	● BSc Electrical and Computer Engineering	● BEng (Hons) Electrical and Electronic Engineering
Duration/Mode	3 years/Full time	4 years/Full time	4 years/Full time	4 years/Full time
Soft Skills	English	English	English Composition I	
	General and professional English communication	General and professional English communication	English Composition II	
	Communication skills	Communication skills	Intro. To Communications	Professional Communication for Electrical Engineers
	Written and oral skills	Written and oral skills		
				Engineering Professionalism
			Succeeding as a Global Wildcat	
			Succeeding as a Global Professional	
			Cross-disciplinary Design A	
			Cross-disciplinary Design	
				Introduction to Engineering Design
				Project Management
				Environmental Management
General Education Module	Human, economic and social science	Human, economic and social science	Contemporary Society and Development	Contemporary Society & Development
	Introduction to Finance	Introduction to Finance	Introduction to Psychological Science	Economics & Accounting
			History of Mauritius	Sociology for Engineers
			Understanding the World of Commerce	
			Anthropology of Indian Ocean Societies	
			Engineering Ethics	
			Sustainable Development Practices	
			Introduction to Engineering Design	

Legend ● Qualifying ● Incomplete

CHEMICAL TECHNICIAN

Institutions	University of Technology	Polytechnics Mauritius
Courses	Diploma in Bioanalytical Laboratory Technology	Diploma in Pharmacy
Duration/Mode	2 years/Full time	3 years/Full time
Most relevant	Chemistry and Biochemistry	Biochemistry
		Basic Physical Chemistry
		Basic Organic Chemistry
	Analytical Chemistry	Analytical Pharmaceutical Chemistry
		Basic Formulation
	Basic Laboratory Techniques	
	Laboratory Mathematics	
	Laboratory Management and Practices I	
	Laboratory Management and Practices II	
	Laboratory Techniques in Food Sciences	
	Methods in Laboratory based research	Introduction to Research Methodology
Soft skills	Health Information, Communication and Technology	Introduction to Information Communication Technology
		Business French
		Business English
		Dispensing Technique and Communication
		Professional Ethics
		Introduction to Entrepreneurship

Legend Qualifying Incomplete

MACHINE TECHNICIAN

Institutions	MITD
Courses	● Brevet De Technicien (BT) En Fabrication Mecanique - (Maintenance And Production Mechanics)
Duration/Mode	3 years/Full time
Mechanical (skills)	Turning Practice
	Milling Practice
	Fitting Practice/Assembling
	Limits and Fits, Welding
	Automation Principles & Progammable Logic Control (P.L.C.)
	Workshops Practice
	Workshop Theory and Safety Measures
	Computerised Numerical Control
	Hydraulics
	Mechanical Drawing and Applied Mechanics
	Mathematics
	Physics
	Computer Aided Drawing/DAO
Soft skills	English
	French
	Computer studies
	Labour Legislation
	Physical Education

Legend ● Qualifying ● Incomplete

TECHNICIAN

POSTPRESS TECHNICIAN

Institutions	MITD
Courses	Print Finishing NC Level 3
Duration/Mode	1 years/Apprentice scheme
Most relevant	Trade calculations for printing
	Business and quality principles for printing
	Printing and graphic pre-press industries
	Safe working practices in the printing and graphic pre-press industries
	Set up and operate collator/stitcher/trimmer for print finishing
	Set up and operate a collator / gatherer /adhesive binder for print finishing
	Set and operate a sewing machine for bookbinding block
	Using a manual blocking machine for bookbinding
	Hand bind books for bookbinding
	Set and operate a stitcher wire for print finishing
	Set and operate folding machine
	Set and operate adhesive binding
	Operate a guillotine for printing production
	Routine and preventive maintenance for the printing industry
	Cut and crease printed substrates for printing production
	Technical drafting
	Mathematics
Soft skills	Communication Skills
	Ethics
	Work ethics
	Office packages
	Safety and heal requirements
	Entrepreneurship
	Information Technology

Legend Qualifying Incomplete

FOOD TECHNICIAN

Institutions	University of Mauritius		
Courses	🟢 BSc (Hons) Food Science and Technology	🟢 BSc (Hons) Nutritional Sciences	🟠 BSc (Hons) Applied Biochemistry
Duration/Mode	3 years/Full time	3 years/Full time	3 years/Full time
Most relevant	Basic Food Microbiology	Microbiology of Foods	Basic Microbiology and Techniques
	Biochemistry and Nutrition	Introduction to Nutritional Biochemistry	Food Biochemistry and Enzymology
			Applied Food Biochemistry
	Food Chemistry and Food Analysis I	Analysis and Chemistry of Foods	
	Food Chemistry and Food Analysis II		
	Basic Food Engineering	Food Technology and Food Production	
	Chemistry Fundamentals and Laboratory Techniques	Nutrition Science Laboratory	
	Introduction to Management in Food Industries		
	Unit Operations in Food Processing		
	Food Processing	Food Processing and Preservation	
	Food Economics and Marketing		
	Food Quality Management	Food Quality Assurance	
	Food Safety Management		
	Food Hygiene		
	Sensory Analysis		
	Food Legislation		
	Developments in Food Science and Technology		
	Instrumentation and Process Control in the Food Industries		
	Food Product Development		
		Nutritional Assessment and Food Habits	
		Human Nutritional Needs	
		Physicochemical and Biological Aspects of Food	
	Introductory Statistics		Introductory Statistics
	Statistical Methods for Food Scientists		Statistical Methods and Computational Biology
			Biotechniques and Analytical Methods
Soft skills	Effective Scientific Communication: Principles and Practice I		Scientific Communication Skills & Methods
	Effective Scientific Communication: Principles and Practice II		

Legend 🟢 Qualifying 🟠 Incomplete

AGRICULTURAL TECHNICIAN

Institutions	University of Mauritius	
Modules	BSc (Hons) Agricultural Science and Technology	BSc (Hons) Crop Technology (Minor: Sheltered Farming)
Duration/Mode	3.5 years/Full time	3.5 years/Full time
Most relevant	Agricultural Chemistry and Soil Science	Agricultural Chemistry and Soil Science
	Biochemistry and Biotechnology	Biochemistry and Biotechnology
	Botany and Plant Physiology	Botany and Plant Physiology
	Plant Pests, Diseases and Weeds	Plant Pests, Diseases and Weeds
	Emerging Crop Production Technologies	
	Agronomy and Sustainable Horticulture	Agronomy and Sustainable Horticulture
		Crop Nutrition and Fruit Production
		Crop Propagation and Nursery Management
		Crop Biodiversity and Conservation
		Genetics and Breeding of Crops
	Microbiology	Microbiology
	Data Handling and Research Methodology	Data Handling and Research Methodology
	Experimental Designs and Sampling Techniques	Experimental Designs and Sampling Techniques
Soft skills	Effective Scientific Communication: Principles and Practice I	Effective Scientific Communication: Principles and Practice I
	Effective Scientific Communication: Principles and Practice II	Effective Scientific Communication: Principles and Practice II
		Entrepreneurship & Innovations for Agribusiness
Commonalities	Agrometeorology and Climate Change	Agrometeorology and Climate Change
	Economics of the Agrifood Sector	Economics of the Agrifood Sector
	Principles and Applications of Agricultural Engineering	Principles and Applications of Agricultural Engineering

Legend Qualifying Incomplete

REFRIGERATION/AIR CONDITIONING TECHNICIAN

Institutions	MITD
Module	Refrigeration And Air Conditioning NC4
Duration/Mode	2400 hours/Full time
	Industrial Air Conditioning
	Industrial Refrigeration
	Commercial Refrigeration

Legend Qualifying Incomplete

AUTOMATION TECHNICIAN (1/5)

Institutions	Université des Mascareignes		MITD	
Courses	● Diploma in Electrical Engineering and Automation	● Diploma in Electromechanical and Automation Engineering	● Brevet De Technicien (BT) En Electronique - (Electronics)	● Industrial Electronics NC4
Duration/Mode	2 years/Full time	2 years/Full time	3 years/Full time	1 year/Full time
Electronics	Optoelectronics / Thermal Physics			
	Basic functions and components of electronics			
	Linear circuits and components			AC and DC Circuit Analysis
	Analysis and synthesis of logical systems			
	Sensors / EMC			Sensors and Transducers
	Fundamental functions of electronics			
	Architecture of processing systems			Microprocessor/Micro-Controller Technology
	Modeling and control of linear digital systems			
	Corrections of continuous linear and digital systems			Analogue and Digital Electronics
				Power Electronics
				Programmable Logic Controllers

Legend ● Qualifying ● Incomplete

AUTOMATION TECHNICIAN (2/5)

Institutions	Université des Mascareignes		MITD	
Courses	● Diploma in Electrical Engineering and Automation	● Diploma in Electromechanical and Automation Engineering	● Brevet De Technicien (BT) En Electronique - (Electronics)	● Industrial Electronics NC4
Duration/Mode	2 years/Full time	2 years/Full time	3 years/Full time	1 year/Full time
ICT and programming	Algorithms, Programming	Informatique	Computer studies	
	Information processing and transmission			
	Distribution and security			
	Second order systems, filters			
	Networks			PC Networking Techniques
	Process supervision and control			PCT Technology
	Control systems, Regulation	L`Instrumentation et la Régulation		
	Data base			
	Analog Telecommunications			
	Digital Telecommunications			
	Control and command of industrial systems			
		Automatismes 1	Circuit Diagrams and Automation	
		Automatismes 2		
		Automatismes 3		
		Réalisations de Systèmes 1		
		Réalisations de Systèmes 2		
		La commande numérique et analyse vibratoire		
			Computer Aided Drawing/DAO	Technical drawing

Legend ● Qualifying ● Incomplete

AUTOMATION TECHNICIAN (3/5)

Institutions	Université des Mascareignes		MITD	
Courses	● Diploma in Electrical Engineering and Automation	● Diploma in Electromechanical and Automation Engineering	● Brevet De Technicien (BT) En Electronique - (Electronics)	● Industrial Electronics NC4
Duration/Mode	2 years/Full time	2 years/Full time	3 years/Full time	1 year/Full time
Mathematics	Fundamentals of Algebra and Trigonometry	Mathématiques 1	Mathematics	Mathematics
	Fundamental of analytical Mathematics	Mathématiques 2		Applied Mathematics
	Integral calculus and differential equations	Mathématiques 3		
	Elements of applied mathematics			
	Mathematical tools for Fourier analysis			
	Mathematical tools for discrete signals			
	Analytical Mathematics			
	Linear algebra and applications			
	Research and implementation			
	Research and documentation			
	Probability and Inferential Statistics			
Mechanical and Material	Mechanics – Electromagnetism	Mécanique 1		Basic mechanical skills
		Mécanique 2		
		Thermodynamique		
		Mécanique des fluides et Hydraulique Industriel		
		Transfert thermique et Froid		
			Mechanical Drawing and Applied Mechanics	
			Applied Physics	

Legend ● Qualifying ● Incomplete

AUTOMATION TECHNICIAN (4/5)

Institutions	Université des Mascareignes		MITD	
Courses	● Diploma in Electrical Engineering and Automation	● Diploma in Electromechanical and Automation Engineering	● Brevet De Technicien (BT) En Electronique - (Electronics)	● Industrial Electronics NC4
Duration/Mode	2 years/Full time	2 years/Full time	3 years/Full time	1 year/Full time
Electrical	Inductors and transformers			
	DC machines and rectification			
	Converters			
	Electrical distribution			Power Supply Systems
	Semiconductors			
		Électrotechnique 1		Electrical Technology
		Électrotechniques 2		
		Physique Appliquée 1		
		Étude des Parties Opératives 1		
		Étude des Parties Opératives 2		
		Étude des Parties Opératives 3		
		Science des Matériaux		
			Instrumentation and Measurement	Instrumentation
			Plant Engineering	
			Electricity/Electronics Technology and Safety Measures	
				Structured Cabling Techniques
				Servicing of Electrical Devices and Servicing of Computers
Maintenance		Ingénierie de la Maintenance 1		
		Ingénierie de la Maintenance 2		
		Maintenance Basée sur la Fiabilité 1		
		Maintenance Basée sur la Fiabilité 2		
		Pratique de la FMDS		

Legend ● Qualifying ● Incomplete

AUTOMATION TECHNICIAN (5/5)

Institutions	Université des Mascareignes		MITD	
Courses	● Diploma in Electrical Engineering and Automation	● Diploma in Electromechanical and Automation Engineering	● Brevet De Technicien (BT) En Electronique - (Electronics)	● Industrial Electronics NC4
Duration/Mode	2 years/Full time	2 years/Full time	3 years/Full time	1 year/Full time
Soft Skills	English	Techniques d`Expression en Anglais 1	English	
	General and professional English communication			
		Techniques d`Expression en Français 1	French	
		Techniques d`Expression en Français 2		
	Communication skills			
				Use of Software Packages
Others	Human, economic and social science	Économie, Organisation et Gestion	Labour Legislation	Entrepreneurship
				Safety at work
				Work Ethics

Legend ● Qualifying ● Incomplete

ELECTRICIAN (1/5)

Institutions	Université des Mascareignes	MITD		JSS Academy (City & Guilds)		JSS Academy & VTI (City & Guilds)
Module	Diploma in Electrical Engineering and Automation	National Diploma In Applied Electrical And Electronic Engineering	Higher National Diploma In Electrical & Electronics Engineering	Level 4 Diploma in Electrical and Electronic Engineering	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering	Level 3 Diploma in Engineering - Electrical and Electronic Engineering
Duration/Mode	**2 years/Full time**	**2&3 years / Full & Part time**	**2&3 years / Full & Part time**	**? / Full & Part time**	**? / Full & Part time**	**2 years/ Full & Part time**
Electrical	Inductors and transformers	Electrical Supply, Distribution and Installation	Electrical & Electronic Principles	Principles of electrical/electronic engineering	Electrical and electronic engineering principles	
				Principles and operation of electrical machines	Principles and operation of electrical machines	Principles of electrical & electronic engineering
	DC machines and rectification					
	Converters					
	Electrical distribution		Utilisation of Electrical Energy	Electrical supply and distribution		
				Electrical services and installation		
	Semiconductors					
						Maintenance of electrical equipment and systems
		Electrical Protection and Earthing		Electrical protection techniques for engineering operations		
				Testing and measurement of electronic and electrical systems		
		Digital and Analogue Devices and Circuits	Digital and Analogue Devices and Circuits		Digital design	Power supply, and analogue and digital circuit principles and fault
				Principles of analogue circuits	Analogue design	
						Mechatronics systems principles and fault finding
		Engineering Design and CAD System		Computer Aided Design for manufacture		
			Engineering Design	Engineering design		
			Project Design, Implementation and Evaluation			
		Health and Safety and Risk Assessment	Health & Safety and Risk Assessment			Engineering health and safety
			Engineering Science			Engineering principles
				Quality assurance and control		
				Engineering planning and scheduling		Organising and managing engineering operations
				Maintenance of engineering systems and equipment		
				Engineering Procurement		
			Industrial Plant Services			

Legend Qualifying Incomplete

ELECTRICIAN (2/5)

Institutions	Université des Mascareignes	MITD		JSS Academy (City & Guilds)		JSS Academy & VTI (City & Guilds)
Module	Diploma in Electrical Engineering and Automation	National Diploma In Applied Electrical And Electronic Engineering	Higher National Diploma In Electrical & Electronics Engineering	Level 4 Diploma in Electrical and Electronic Engineering	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering	Level 3 Diploma in Engineering - Electrical and Electronic Engineering
Duration/Mode	**2 years/Full time**	**2&3 years / Full & Part time**	**2&3 years / Full & Part time**	**? / Full & Part time**	**? / Full & Part time**	**2 years/ Full & Part time**
Electronics	Optoelectronics / Thermal Physics					
	Basic functions and components of electronics					
	Linear circuits and components					
	Analysis and synthesis of logical systems			Sequential and combinational logic circuits		
	Sensors / EMC					
	Fundamental functions of electronics					
	Architecture of processing systems	Microprocessor Systems		Microprocessor based systems		
	Modeling and control of linear digital systems					
	Corrections of continuous linear and digital systems					
		Programmable Logic Controllers	Programmable Logic Controllers	Programmable logic controllers		
		Applications of Power Electronics.				Electronic power control principles and practice
					Electronic communication systems	
					Principles of signal processing	
					Electronic materials science	

Legend Qualifying Incomplete

ELECTRICIAN (3/5)

Institutions	Université des Mascareignes	MITD		JSS Academy (City & Guilds)		JSS Academy & VTI (City & Guilds)
Module	Diploma in Electrical Engineering and Automation	National Diploma In Applied Electrical And Electronic Engineering	Higher National Diploma In Electrical & Electronics Engineering	Level 4 Diploma in Electrical and Electronic Engineering	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering	Level 3 Diploma in Engineering - Electrical and Electronic Engineering
Duration/Mode	**2 years/Full time**	**2&3 years / Full & Part time**	**2&3 years / Full & Part time**	**? / Full & Part time**	**? / Full & Part time**	**2 years/ Full & Part time**
ICT and programming	Algorithms, Programming			Programming using C		
	Information processing and transmission					
	Distribution and security					
	Second order systems, filters					
	Networks		Data Communications & Networks			
	Process supervision and control		Statistical Process Control			
	Control systems, Regulation	Instrumentation and Control Principles	Instrumentation and Control Principles		Instrumentation and control systems	
	Data base					
	Analog Telecommunications			Data communication and networks		
	Digital Telecommunications					
	Control and command of industrial systems					
			Computer Control of Plants		Computer automated and robotic systems principles and control	
			Industrial Robot Technology			

Legend Qualifying Incomplete

ELECTRICIAN (4/5)

Institutions	Université des Mascareignes	MITD		JSS Academy (City & Guilds)		JSS Academy & VTI (City & Guilds)
Module	Diploma in Electrical Engineering and Automation	National Diploma In Applied Electrical And Electronic Engineering	Higher National Diploma In Electrical & Electronics Engineering	Level 4 Diploma in Electrical and Electronic Engineering	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering	Level 3 Diploma in Engineering - Electrical and Electronic Engineering
Duration/Mode	**2 years/Full time**	**2&3 years / Full & Part time**	**2&3 years / Full & Part time**	**? / Full & Part time**	**? / Full & Part time**	**2 years/ Full & Part time**
Mathematics	Fundamentals of Algebra and Trigonometry			Engineering mathematics	Advanced mathematics for electrical and electronic engineering	Advanced mathematics and science
	Fundamental of analytical Mathematics					
	Integral calculus and differential equations					
	Elements of applied mathematics					
	Mathematical tools for Fourier analysis					
	Mathematical tools for discrete signals					
	Analytical Mathematics					
	Linear algebra and applications					
	Research and implementation					
	Research and documentation		Analytical Methods for Engineers			
	Probability and Inferential Statistics			Statistical analysis for engineers		
Mechanical and Material	Mechanics – Electromagnetism					
				Principles of composite materials		
				Principles of composites manufacture		
				Applications of Pneumatic & Hydraulics		

Legend Qualifying Incomplete

ELECTRICIAN (5/5)

Institutions	Université des Mascareignes	MITD		JSS Academy (City & Guilds)		JSS Academy & VTI (City & Guilds)
Module	Diploma in Electrical Engineering and Automation	National Diploma In Applied Electrical And Electronic Engineering	Higher National Diploma In Electrical & Electronics Engineering	Level 4 Diploma in Electrical and Electronic Engineering	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering	Level 3 Diploma in Engineering - Electrical and Electronic Engineering
Duration/Mode	**2 years/Full time**	**2&3 years / Full & Part time**	**2&3 years / Full & Part time**	**? / Full & Part time**	**? / Full & Part time**	**2 years/ Full & Part time**
Soft Skills	English					
	General and professional English communication					
	Communication skills					
		Entrepreneurship				
		Business Management Techniques	Business Management Techniques for Engineers	Planning and implementing change within businesses	Business management	
				Developing business improvement plans		
				Human factors in the workplace		
				Personal and professional development		
				Managing information and knowledge		
					Project management	
Others	Human, economic and social science					

Legend Qualifying Incomplete

MECHANICAL TECHNICIAN

Institution	Université des Mascareignes
Module	Diploma in Electromechanical and Automation Engineering
Duration/Mode	2 years/ Full time
ICT and programming	Informatique
	L`Instrumentation et la Régulation
	Automatismes 1
	Automatismes 2
	Automatismes 3
	Réalisations de Systèmes 1
	Réalisations de Systèmes 2
	La commande numérique et analyse vibratoire
Mathematics	Mathématiques 1
	Mathématiques 2
	Mathématiques 3
Mechanical and Material	Mécanique 1
	Mécanique 2
	Thermodynamique
	Mécanique des fluides et Hydraulique Industriel
	Transfert thermique et Froid
Electrical	Électrotechnique 1
	Électrotechniques 2
	Physique Appliquée 1
	Étude des Parties Opératives 1
	Étude des Parties Opératives 2
	Étude des Parties Opératives 3
	Science des Matériaux
Maintenance	Ingénierie de la Maintenance 1
	Ingénierie de la Maintenance 2
	Maintenance Basée sur la Fiabilité 1
	Maintenance Basée sur la Fiabilité 2
	Pratique de la FMDS
Soft Skills	Techniques d`Expression en Anglais 1
	Techniques d`Expression en Français 1
	Techniques d`Expression en Français 2
Others	Économie, Organisation et Gestion

Legend Qualifying Incomplete

ELECTROTECHNICIAN (1/5)

Institutions	Université des Mascareignes	MITD		JSS Academy (City & Guilds)		JSS Academy & VTI (City & Guilds)
Module	Diploma in Electrical Engineering and Automation	National Diploma In Applied Electrical And Electronic Engineering	Higher National Diploma In Electrical & Electronics Engineering	Level 4 Diploma in Electrical and Electronic Engineering	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering	Level 3 Diploma in Engineering - Electrical and Electronic Engineering
Duration/Mode	**2 years/Full time**	**2&3 years / Full & Part time**	**2&3 years / Full & Part time**	**? / Full & Part time**	**? / Full & Part time**	**2 years/ Full & Part time**
Electrical	Inductors and transformers	Electrical Supply, Distribution and Installation	Electrical & Electronic Principles	Principles of electrical/electronic engineering	Electrical and electronic engineering principles	
				Principles and operation of electrical machines	Principles and operation of electrical machines	Principles of electrical & electronic engineering
	DC machines and rectification					
	Converters					
	Electrical distribution		Utilisation of Electrical Energy	Electrical supply and distribution		
				Electrical services and installation		
	Semiconductors					
						Maintenance of electrical equipment and systems
		Electrical Protection and Earthing		Electrical protection techniques for engineering operations		
				Testing and measurement of electronic and electrical systems		
		Digital and Analogue Devices and Circuits	Digital and Analogue Devices and Circuits		Digital design	Power supply, and analogue and digital circuit principles and fault
				Principles of analogue circuits	Analogue design	
						Mechatronics systems principles and fault finding
		Engineering Design and CAD System		Computer Aided Design for manufacture		
			Engineering Design	Engineering design		
			Project Design, Implementation and Evaluation			
		Health and Safety and Risk Assessment	Health & Safety and Risk Assessment			Engineering health and safety
			Engineering Science			Engineering principles
				Quality assurance and control		
				Engineering planning and scheduling		Organising and managing engineering operations
				Maintenance of engineering systems and equipment		
				Engineering Procurement		
			Industrial Plant Services			

Legend: Qualifying / Incomplete

ELECTROTECHNICIAN (2/5)

Institutions	Université des Mascareignes	MITD		JSS Academy (City & Guilds)		JSS Academy & VTI (City & Guilds)
Module	Diploma in Electrical Engineering and Automation	National Diploma In Applied Electrical And Electronic Engineering	Higher National Diploma In Electrical & Electronics Engineering	Level 4 Diploma in Electrical and Electronic Engineering	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering	Level 3 Diploma in Engineering - Electrical and Electronic Engineering
Duration/Mode	**2 years/Full time**	**2&3 years / Full & Part time**	**2&3 years / Full & Part time**	**? / Full & Part time**	**? / Full & Part time**	**2 years/ Full & Part time**
Electronics	Optoelectronics / Thermal Physics					
	Basic functions and components of electronics					
	Linear circuits and components					
	Analysis and synthesis of logical systems			Sequential and combinational logic circuits		
	Sensors / EMC					
	Fundamental functions of electronics					
	Architecture of processing systems	Microprocessor Systems		Microprocessor based systems		
	Modeling and control of linear digital systems					
	Corrections of continuous linear and digital systems					
		Programmable Logic Controllers	Programmable Logic Controllers	Programmable logic controllers		
		Applications of Power Electronics.				Electronic power control principles and practice
					Electronic communication systems	
					Principles of signal processing	
					Electronic materials science	

Legend Qualifying Incomplete

ELECTROTECHNICIAN (3/5)

Institutions	Université des Mascareignes	MITD		JSS Academy (City & Guilds)		JSS Academy & VTI (City & Guilds)
Module	Diploma in Electrical Engineering and Automation	National Diploma In Applied Electrical And Electronic Engineering	Higher National Diploma In Electrical & Electronics Engineering	Level 4 Diploma in Electrical and Electronic Engineering	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering	Level 3 Diploma in Engineering - Electrical and Electronic Engineering
Duration/Mode	**2 years/Full time**	**2&3 years / Full & Part time**	**2&3 years / Full & Part time**	**? / Full & Part time**	**? / Full & Part time**	**2 years/ Full & Part time**
ICT and programming	Algorithms, Programming			Programming using C		
	Information processing and transmission					
	Distribution and security					
	Second order systems, filters					
	Networks		Data Communications & Networks			
	Process supervision and control		Statistical Process Control			
	Control systems, Regulation	Instrumentation and Control Principles	Instrumentation and Control Principles		Instrumentation and control systems	
	Data base					
	Analog Telecommunications			Data communication and networks		
	Digital Telecommunications					
	Control and command of industrial systems					
			Computer Control of Plants		Computer automated and robotic systems principles and control	
			Industrial Robot Technology			

Legend Qualifying Incomplete

ELECTROTECHNICIAN (4/5)

Institutions	Université des Mascareignes	MITD		JSS Academy (City & Guilds)		JSS Academy & VTI (City & Guilds)
Module	Diploma in Electrical Engineering and Automation	National Diploma In Applied Electrical And Electronic Engineering	Higher National Diploma In Electrical & Electronics Engineering	Level 4 Diploma in Electrical and Electronic Engineering	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering	Level 3 Diploma in Engineering - Electrical and Electronic Engineering
Duration/Mode	**2 years/Full time**	**2&3 years / Full & Part time**	**2&3 years / Full & Part time**	**? / Full & Part time**	**? / Full & Part time**	**2 years/ Full & Part time**
Mathematics	Fundamentals of Algebra and Trigonometry			Engineering mathematics	Advanced mathematics for electrical and electronic engineering	Advanced mathematics and science
	Fundamental of analytical Mathematics					
	Integral calculus and differential equations					
	Elements of applied mathematics					
	Mathematical tools for Fourier analysis					
	Mathematical tools for discrete signals					
	Analytical Mathematics					
	Linear algebra and applications					
	Research and implementation					
	Research and documentation		Analytical Methods for Engineers			
	Probability and Inferential Statistics			Statistical analysis for engineers		
Mechanical and Material	Mechanics – Electromagnetism					
				Principles of composite materials		
				Principles of composites manufacture		
				Applications of Pneumatic & Hydraulics		

Legend Qualifying Incomplete

ELECTROTECHNICIAN (5/5)

Institutions	Université des Mascareignes	MITD		JSS Academy (City & Guilds)		JSS Academy & VTI (City & Guilds)
Module	Diploma in Electrical Engineering and Automation	National Diploma In Applied Electrical And Electronic Engineering	Higher National Diploma In Electrical & Electronics Engineering	Level 4 Diploma in Electrical and Electronic Engineering	Level 5 Advanced Technician Diploma in Electrical and Electronic Engineering	Level 3 Diploma in Engineering - Electrical and Electronic Engineering
Duration/Mode	**2 years/Full time**	**2&3 years / Full & Part time**	**2&3 years / Full & Part time**	**? / Full & Part time**	**? / Full & Part time**	**2 years/ Full & Part time**
Soft Skills	English					
	General and professional English communication					
	Communication skills					
		Entrepreneurship				
		Business Management Techniques	Business Management Techniques for Engineers	Planning and implementing change within businesses	Business management	
				Developing business improvement plans		
				Human factors in the workplace		
				Personal and professional development		
				Managing information and knowledge		
					Project management	
Others	Human, economic and social science					

Legend Qualifying Incomplete

MAINTENANCE TECHNICIAN (1/2)

Institutions	MITD		College Technique St Gabriel
Course	Industrial Machine Maintenance NC3	Industrial Machine Maintenance NC4	BEP Maintenance Des Systemes Mécaniques Automatisés
Duration/Mode	1 year/Full time	2400 hours/Full time	2 years/ Full time
Mechanical and Maintenance	Trade calculations and units for mechanical engineering trades	Mechanical and Maintenance Practice	Mécanique appliquée
	Basic mechanics for mechanical engineering trades		
	Basic knowledge of engineering materials		
	Select, use, and care for engineering hand tools		
	Select, use, and care for simple measuring devices		
	Select, use, and care for engineering marking-out equipment		
	Select, use, and care for engineering dimensional measuring equipment		
	Fits, limits and tolerances in engineering		
	Select, use, and maintain portable hand held engineering power tools		
	Select, use and maintain bench and pillar drilling machine		
	Fasteners for mechanical engineering		
	Simple turning operations		Tournage
	Basic welding		Soudure
	Machine leveling and alignment		Ajustage, Fraisage
	Shift loads in engineering installation, maintenance, and fabrication work		Montage (démontage/Réglage des sous-ensembles et des composants)
	Mechanical power transmission		
	Lubricants and lubrication systems		
	Select and replace static seals in machines and equipment		
	Pumps, fans, compressors and valves used in engineering		Pneumatique
	Industrial hydraulic machines		Hydraulique
	Bearings used in machines and equipment		
	Air conditioning principles and application	Refrigeration and Air Conditioning	
	Plant Technology	Plant Technology	
			Maintenance (Corrective, Preventive, Amelioration et installation)

Legend Qualifying Incomplete

MAINTENANCE TECHNICIAN

Institutions	MITD		College Technique St Gabriel
Course	Industrial Machine Maintenance NC3	Industrial Machine Maintenance NC4	BEP Maintenance Des Systemes Mécaniques Automatisés
Duration/Mode	1 year/Full time	2400 hours/Full time	2 years/ Full time
Electrical	Magnetism and electricity	Industrial Electricity	Electrotechnique
	Electrical test instruments and measurements		
	Electrical control circuits for single phase and 3 phase electrical motors		
Electronics		Industrial Electronics	Automatisme
			Etudes des parties commandes
General Sciences			Mathematique & Science Physiques
Soft skills	Interpret mechanical engineering drawings		Communication Technique
	Practical Purpose text reading		
	Safe working practices on an engineering worksite		
			Anglais
			Francais & Vie Sociale
			Valeurs humaines

Legend Qualifying Incomplete

OTHER PRODUCTION

PRODUCTION SUPERVISOR

Institutions	University of Mauritius/MEXA
Course	● Diploma in Industrial Engineering and Operations Management
Duration/Mode	
Technical/ Engineering	Computer Applications
	Introduction to Electromechanical Engineering
	Fundamentals of Industrial Automation
	Industrial Engineering Techniques 1
	Industrial Engineering Techniques 2
	Lean Manufacturing Principles
	Introduction to Manufacturing Processes
	Basics of Production Technology
	Introduction to Maintenance Management
Operations & Management	Principles and Practices of Management
	Operations Management Techniques 1
	Operations Management Techniques 2
	Fundamentals of Project Management
	Principles of Occupational Health & Safety
Soft skills	Introduction to Information Technology
	Communication Skills
	Introduction to Statistical Methods

Legend ● Qualifying ● Incomplete