

# ASEM Technical & Vocational Education & Training Seminar Riga, Latvia

25<sup>th</sup> - 26<sup>th</sup> April 2018

INSPIRING BRUNEIANS TOWARDS EXCELLENCE

# PRESENTATION AGENDA

Introduction of IBTE

Alignment to National and Ministerial Initiatives

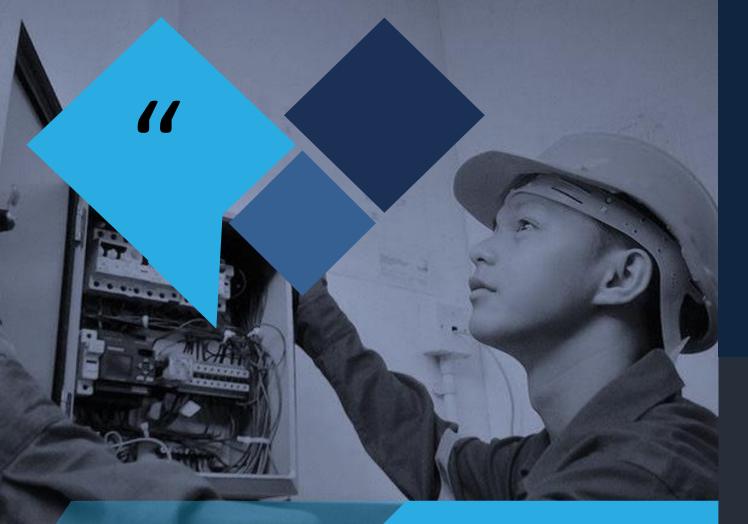
Transformation of Technical Education

IBTE's Strategic Initiatives: Course restructuring

Way forward

# INTRODUCTION OF IBTE

2Z



#### VISION:

A Leading National Institution in Post-Secondary Technical Education and Training by 2018

#### **MISSION:**

To produce highly skilled and employable graduates that meet stakeholders' expectation through holistic learning environment

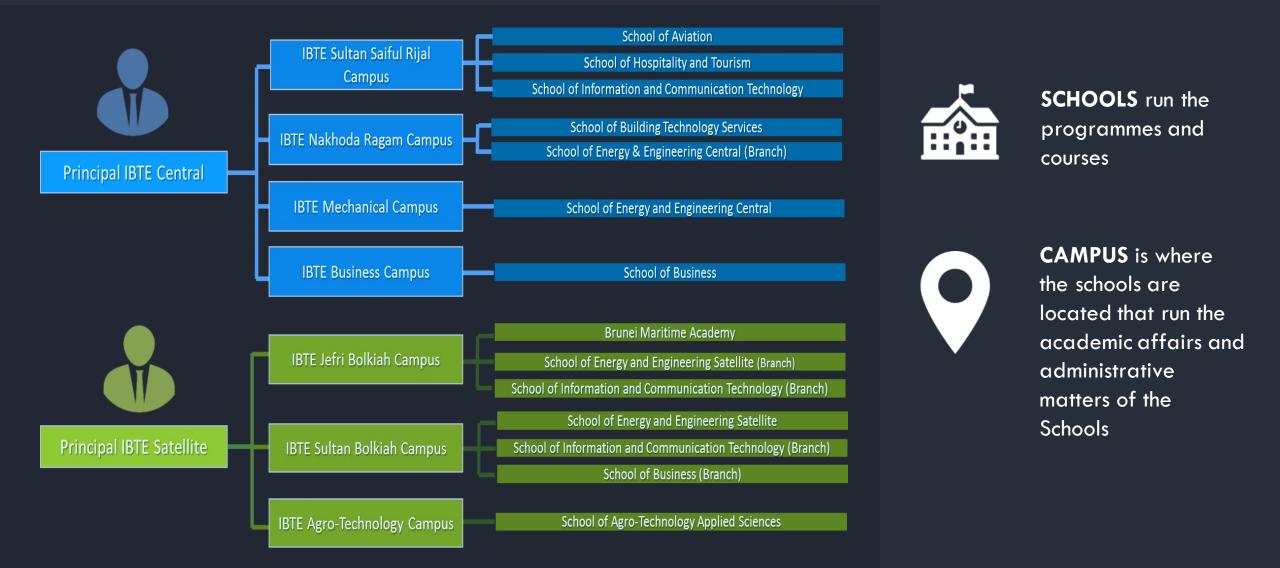
Long term benefits for the individual, economy, society and nation"

"A whole new world of technical education for future generation"

## **CORE VALUES**



# THE TWO NETWORK OF SCHOOLS





#### KEYS:

**IBTE** Central

IBTE Satellite

IBTE Jefri Bolkich Campus ▲ Principal IBTE Satellite Main Office • Brunei Maritime Academy • School of Energy & Engineering Satellite (Branch) • School of Information & Communication Technology IBTE Sultan Bolkiah Campus

School of Energy & Engineering Satellite
School of Information & Communication Technology (Branch)
School of Business (Branch)

> Business Campus • School of

IBTE

**Mechanical** 

△ Principal IBTE Central Main Office

Campus

Engineering C

IBTE

#### IBTE Agro-Technology Campus • School of Agro-Technology & Applied Science

#### IBTE

IBTE

Headquarters

#### Nakhoda Ragam

#### Campus

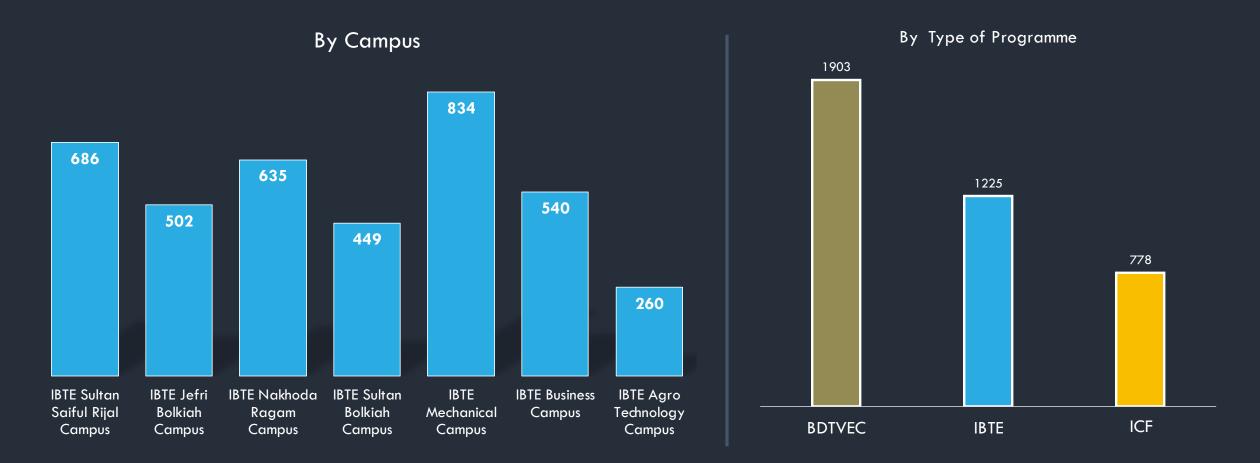
- School of Building Technology Services
- School of Energy & Engineering Central (Branch

#### IBTE Sultan Saiful Rijal Campus

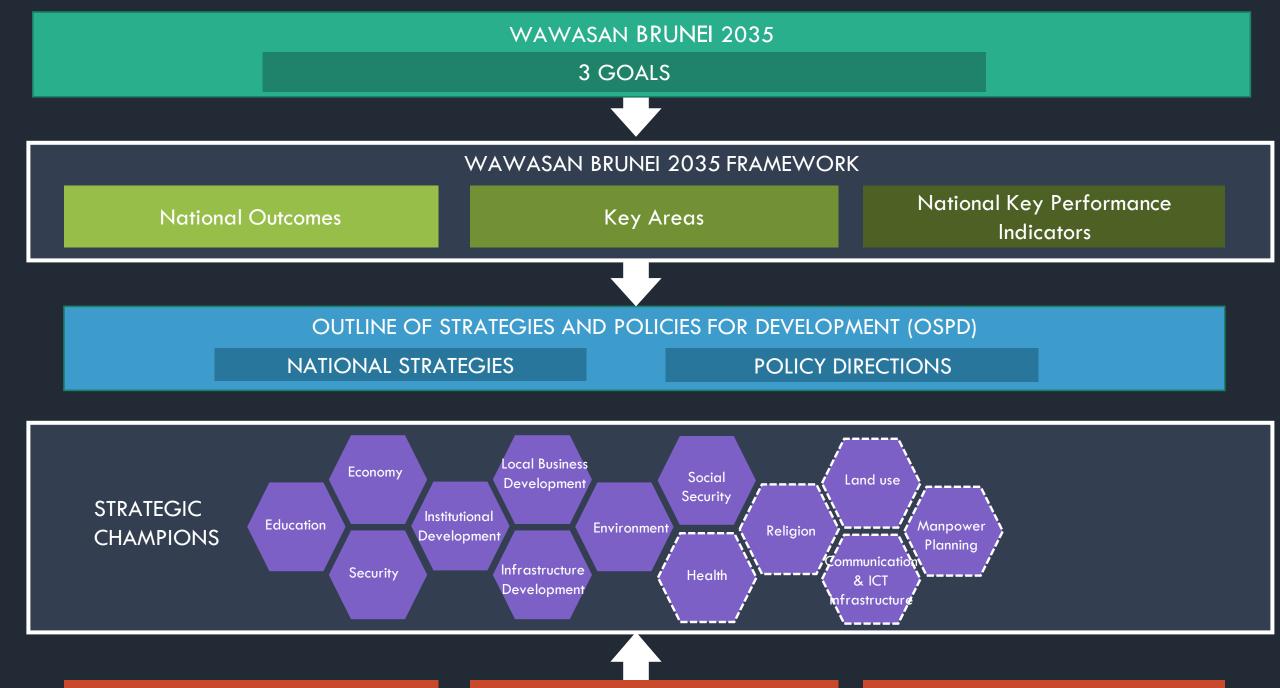
 School of Aviation
 School of Hospitality & Tourism
 School of Information & Communication Technology

### **STUDENTS POPULATION IN 2015**

students in total



# ALIGNMENT TO NATIONAL AND MINISTERIAL INITIATIVES



**Private Sector** 

**Government Sector** 

**Relevant Stakeholders** 



# THREE PILLARS OF SPN 21

Three main changes to ensure that the Brunei education system stays relevant at all times and brings about high quality education and these include: Education Structure



Curriculum and Assessment

Technical Education







NOTE: PISA: Programme for International Student Assessment

# TRANSFOMATION OF TECHNICAL EDUCATION

### TVET SYSTEM CASE FOR CHANGE





Responding to national aspirations (SPN-21 and Wawasan 2035) Lack of focus on skills development and alignment with national manpower needs





Challenge is to build a first-class post-secondary technical education institution

Department of Technical Education (DTE) system no longer relevant or responsive in a modern-day competitive economy



## RATIONALE FOR TRANSFORMATION

Department of Technical (DTE) was established in 1993

DTE is no longer relevant and responsive to the rapid changes in global environment

Lack of focus on skills development and alignment with national manpower needs

A need of a new system of governance to stay relevant and responsive

# HIS MAJESTY'S TITAH ON TECHNICAL EDUCATION

..In this regard, it is also appropriate for the Ministry of Education to re-assess the position of technical and vocational education to ensure that this education can contribute to the requirements of industries and employment for locals..

> Translation of excerpt from His Majesty's Titah in conjunction with the New Year 2013



### THE TRANSFORMATION BEGINS



IN RESPONSE to the need to restructure and establish a new system of technical and vocational Education and training which is better aligned with the social and economic needs of the country, Institut Pendidikan Teknikal Brunei (IBTE) was established on 27th May 2014, following the consent of three documents by His Majesty the Sultan and Yang Di-Pertuan of Brunei Darussalam:

**The White** 

Paper





Institute Brunei Technical Education Order 2014<sub>7</sub>

# VISION ON TECHNICAL EDUCATION IN BRUNEI DARUSSALAM

A whole new world of technical education for future generation 77

Building a first-class post-secondary education institution

Maximising the potential of every individual especially those inclined towards hands-on

TVET system that allows social/career mobility and Education Progression



# PROPOSED KEY CHANGES



Course Restructuring

Expanding Apprenticeship Scheme

New Scheme of Service

**Progression Opportunities & CET** 

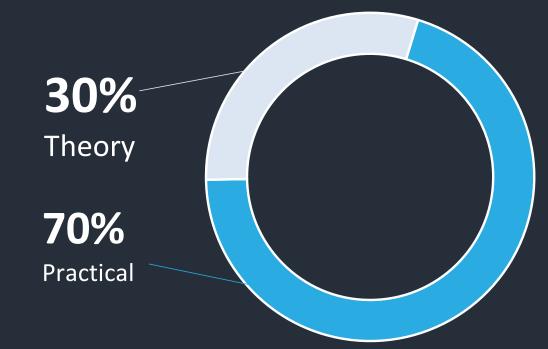
**Communication & Rebranding** 

**Upgrading Training Environment** 

# IBTE STRATEGIC INITIATIVES:

COURSE RESTRUCTURING

## **COURSE RESTRUCTURING**



### **56** COMPETENCY BASED PROGRAMMES

This is to ensure the programmes run in IBTE meet the industrial standards and produce job-ready graduates. IBTE PROGRAMMES ISQ NTEC HNTEC COP Diploma (Level 5)

Competency Based Training and assessment Experiential/authentic teaching and training environment Life skills, entrepreneurship, life long learning skills, MIB & IRK

As of 2016

# INTERNATIONAL/INDUSTRY ACCREDITATION/CERTIFICATION IN IBTE

#### MANAGEMENT LEVEL

#### ISO 9001:2008 -

Quality Management System (For all the Schools, Curriculum Division & Registrar Office)

#### SCHOOL AND PROGRAMME LEVEL

- Brunei Marine Academy: Provisional International Maritime Organisation (IMO) certification
- Welding & Painting Blasting programme : The Welding Institute (TWI) / American Welding Society (AWS) / International Institute of Welding (IIW)
- Rigger programme: LEEA (Lifting Equipment & Engineer Association)
- CIT Programmes: Computing Technology Industry Association (COMPTIA)
- HSSE Programme: OPITO International Minimum Industry Safety Training (IMIST)
- School of Aviation: BAR PART 147/ PART 66

# INTERNATIONAL/INDUSRY CERTIFICATION/ACCREDITATION



# CURRICULUM DEVELOPMENT CYCLE -ADDIE MODEL



# DATA COLLECTION FOR EVIDENCE BASED PLANNING

### PROGRAMME SELECTION

#### **FEATURE ANALYSIS**

The factors identified for ranking the programmes:

- 1. Ratio of 1st choice applicants for a programme to vacancy(Quota) for the programme
- 2. No. of 1st Choice Application for a programme
- 3. Success Rate (Passing Rate) of graduates per programme
- **4.** Employment Rate of graduates from a programme (6 months after graduation)
- 5. TRP (Training Related Placement) Rate match between Qualification against Job of graduates
- 6. Industry Demand for programme



### Energy Industry Competency Fair

#### "Grow our nation with your skills"

Dates: 6th - 7th July 2013 Time: 9am - 5pm Venue: Pusat Latihan Mekanik, Kg Tungku Gadong

 Plenty of exciting technical trainings to match your interest
 Guaranteed Jobs upon successful completion of the programme
 Your chance to network with prospective employers
 OPEN TO ALL who have completed at least Year 9

	Commentary		Suponelly
General Welder			
a Rigger	Mechanical Engineering	Draughtsman	Crane Operator
a Scaffolder	Instrumentation Control Engineering	Plant Engineering	Blaster
a Fitter	to Marine	Electrical Engineering	Industrial painte

# CASE: INDUSTRY COMPETENCY FRAMEWORK (ICF)

### **Outcomes derived from ICF:**

- The collaborative and strong government commitment (EID & MOE)
- Partnership with the industry (EID, MOE & Oil and Gas Industry)
  - Career Chart defined for each program

#### POTENTIAL DEMAND FOR INDUSTRY COMPETENCY FRAMEWORK (ICF) CRITICAL OCCUPATIONS

EICF Phase 1
Programmes

HNTec Phase 1 Programmes	Immediate Vacancies and Positions filled by Expatriates		
a. Electrician Engineering	290		
b. Instrumentation and Control Engineering	105		
c. Plant Engineering	365		
d. Mechanical Engineering	180		

ISQ Phase 1 Programmes				
a. Rigger	355			
b. Welder	684			
c. Scaffolder	605			
d. Marker/Pipefitter	516			

**Total 3100** 

EICF Phase 2						
Programmes						
Phase 2 Programmes Fill by Expatriates						
ISQ Phase 2 P	rogrammes					
a. Mason b. Carpenter c. Industrial Painter & Blaster	271 331 283					
Logistic and Warehouse Management						
a. Crane Operator b. Trailer Driver c. Truck Driver d. Forklift Driver e. Service Driver f. Logistic Foreman h. General helper	343					
<b>Drilling/Well Services*</b> a. Completion and Well Intervention Operator and technician, b. Roustabout, c. Workshop Technician						
Engineering Services* a. Draughting, b. Planner/ Scheduler/Cost Estimator, c. Quality Inspector						

**Total 1228** 

#### BMA (Brunei Marine Academy)

Poquiromonto					
Ranks	Requirements (2013 - 2020)				
DECK					
1. Master	127				
2. Chief Officer	109				
<ol> <li>Second Officer/Second Mate</li> </ol>	119				
4. Officer Trainer	52				
5. Deck Officer Cadet	137				
6. Boatswain	69				
7. Able Bodies Seaman	348				
8. Oridinary Seaman	173				
Sub Total	1117				
ENGINE DEPARTMENT					
1. Chief Engineer	87				
2. Second Engineer	111				
3. Third Engineer	55				
4. Trainer Engineer	41				
5. Engineering Cadet	62				
6. Deck Rating/Mechanist	253				
Sub-total:	602				
CATERING DEPARTMENT					
1. Chief Cook	21				
2. Cook	17				
3. Steward/Mess Boy	65				
Sub-total	103				
GRAND TOTAL	1846				

#### Note:

- i. Projected manpower requirement (from local BSP marine companies)
- ii. Excluding Onshore Base

#### Note:

i. Demand figures as of November 2013 (EICF, Workforce Development Group)

\*Demand data being evaluated

### CHARACTERISTICS OF ICF PROGRAMMES



Strong ownership and support

from industries:

 ✓ Development of curriculum,
 Delivering (Subject Matter Expert) and

✓ Competency Based Assessment

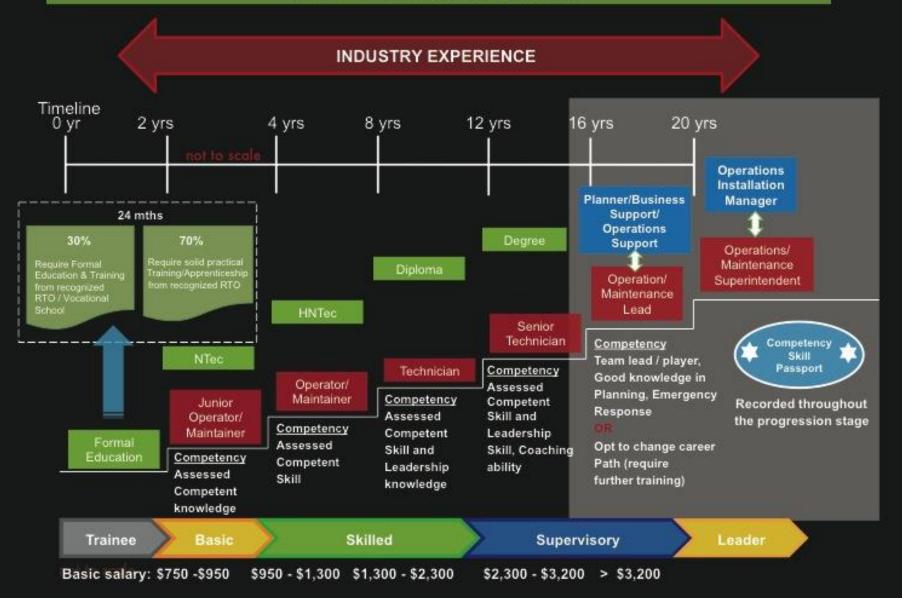


 ✓ Selection of students (Industries and MoE)

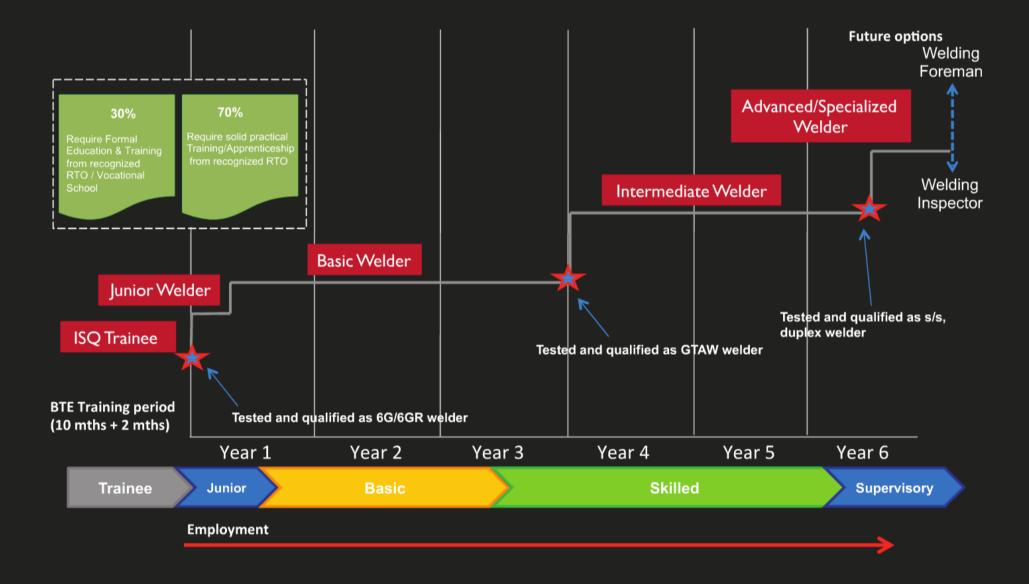


 ✓ Dual certificate
 ✓ Conditional offer of Employment (COE)

#### EICF: CAREER LADDER FOR PLANT ENGINEERING – OPERATOR/ MAINTAINER & TECHNICIAN



#### **EICF CAREER LADDER FOR GENERAL & CODED WELDER**

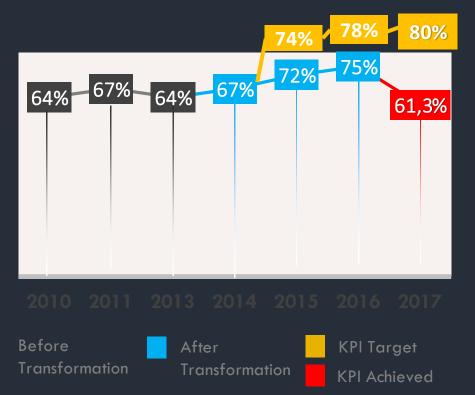


### **IBTE KPI 1**

First Key Performance Indicator (KPI): Employment rate (self-employed & employed)

The percentage of graduates being employed 6 months after graduation from IBTE courses (80% by 2017)

Tai



	Year	Employability Rate	Job Relevant to Program (%)		
	2010	64.2%	n/a		
	2011	66.9%	74%		
			/ 4 /0		
	2013	63.8%	-		
	2014	67.3%	65%		
	2015	71.5%	74%		
	2016	74.5%	74.8%		
	2017	61.3%	66.3%		
get	2018	80%			

#### **EMPLOYMENT RATE OF IBTE GRADUATES**

31 Note: Graph and Table based on 2017 report

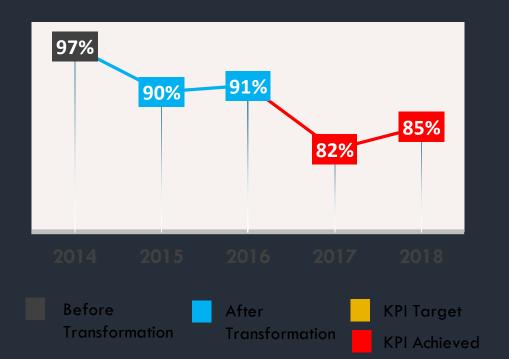
### **IBTE KPI 2**

#### Second Key Performance Indicator (KPI):

#### **Employers'** satisfaction rate

 The proportion of employers (i.e. supervisors) being satisfied with the work and performance of our hired graduates (90% or above by 2017)

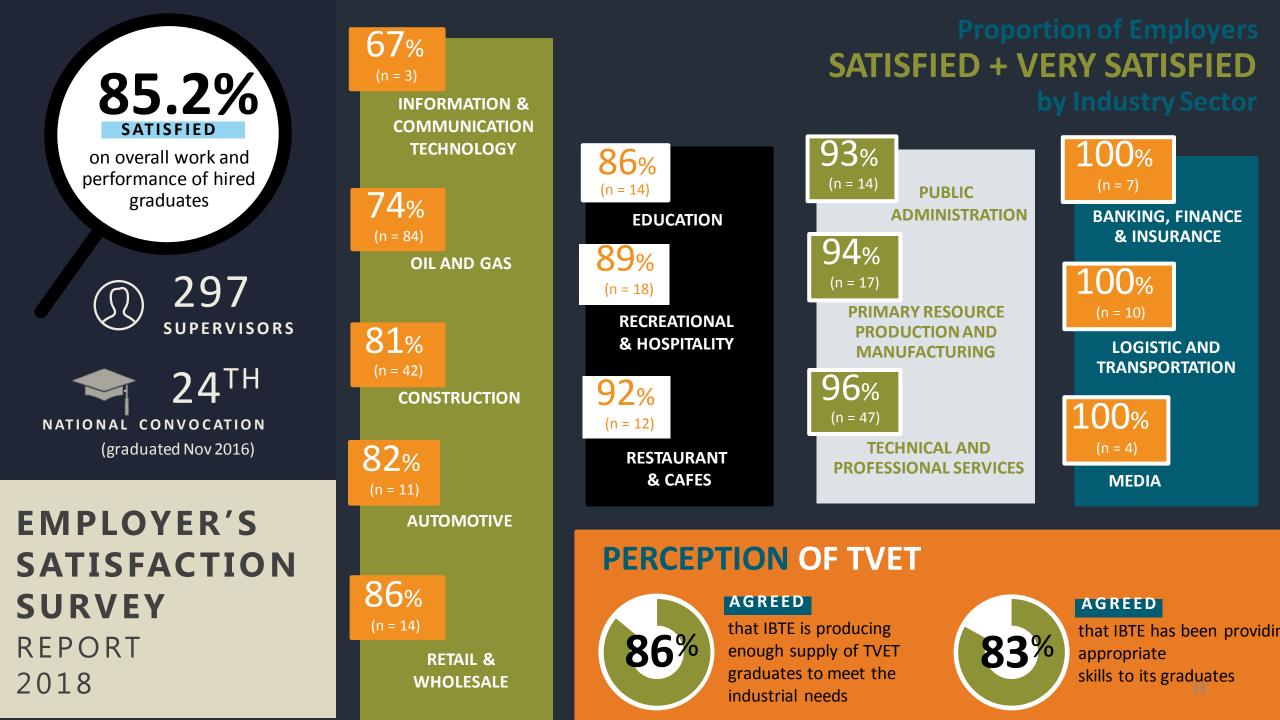
#### **EMPLOYER'S SATISFACTION RATE**



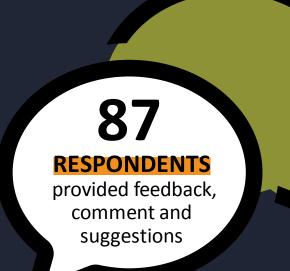
YEAR	2014	2015	2016	2017	2018
Employers' satisfaction rate [% of employers satisfied with our graduates]	96.5%	91.0%	90.9%	81.8%	<b>85.2%</b>
Number of employers' responses	97	134	208	237	297
Number of employers' approached	190	239	237	407	450

Note: Graph and Table based on February 2018 report

32



### EMPLOYERS' COMMENTS & SUGGESTIONS



### EMPLOYER'S SATISFACTION SURVEY REPORT 2018

14% more emphasis on practical skills

#### 15% strengthen students' life skills

4% strengthen students' technical knowledge

6% strengthen students' literacy & numeracy

8% strengthen the industrial attachment

5% Diversify IBTE courses to open up more opportunities

4% Improve teaching & learning

11% keeping curriculum up to date with industrial requirements

4% strengthen IBTE instructors' skills and knowledge

6% expose students to real work environment

IBTE graduates from the 24<sup>th</sup> National Convocation are employed in a wide range of public and private agencies. Our graduates are employees of



EMPLOYER'S SATISFACTION SURVEY REPORT 2018 IBTE graduates from the 24<sup>th</sup> National Convocation are employed in a wide range of public and private agencies. Our graduates are employees of

2018





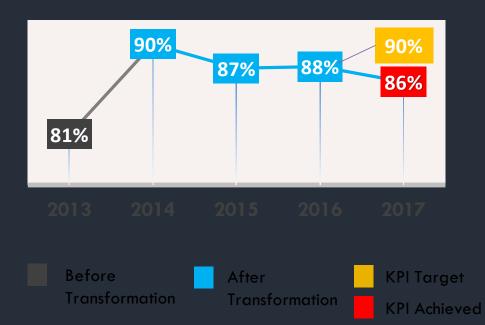
### **IBTE KPI 3**

## ) Third Key Performance Indicator (KPI):

#### **Completion rate**

• The number of students who successfully complete the program divided by the number of students registered (90% by 2017)

#### STUDENTS' COMPLETION RATE



						Target
YEAR	2013	2014	2015	2016	2017	2018
Students' Completion Rate [% of students who successfully complete the program divided by the number of students registered]	80.9%	89.7%	87.3%	87.0%	86.2%	90%

# THANK YOU

For more information, you can find us



ibte.edu.bn



facebook.com/brunei.technical.education

Sol

instagram.com/ibteignite