Quality Assurance

FROM THEORY TO PRACTICE THROUGH SELF-EVALUATION

Skills and background in quality assurance

ECOLE NATIONALE POLYTECHNIQUE –
Maurice AUDIN ENPO-MA

Pr.H.BOUABDESSELAM

HISTORICAL OVERVIEW

In 1970 : The creation of the Normal Superior school of polytechnic teaching (NSSPT),by order N°70-85 of december 1, 1970.

In 1984 : The Change of the school's name to The Normal Superior School of Technic Teaching(NSSTT) by the decree N° 84-205 of august 18, 1984.

In 2008 :Modification of the school status which became The Normal Superior school of technologic teaching of Oran (NSSTT of Oran), by the executive decree N°08-210 of july14, 2008 (transformation into school outside university).

In 2012 : Change of the institution status which became the National Polytechnic School of Oran (NPS of Oran), by the executive decree N°12-376 of october29, 2012.

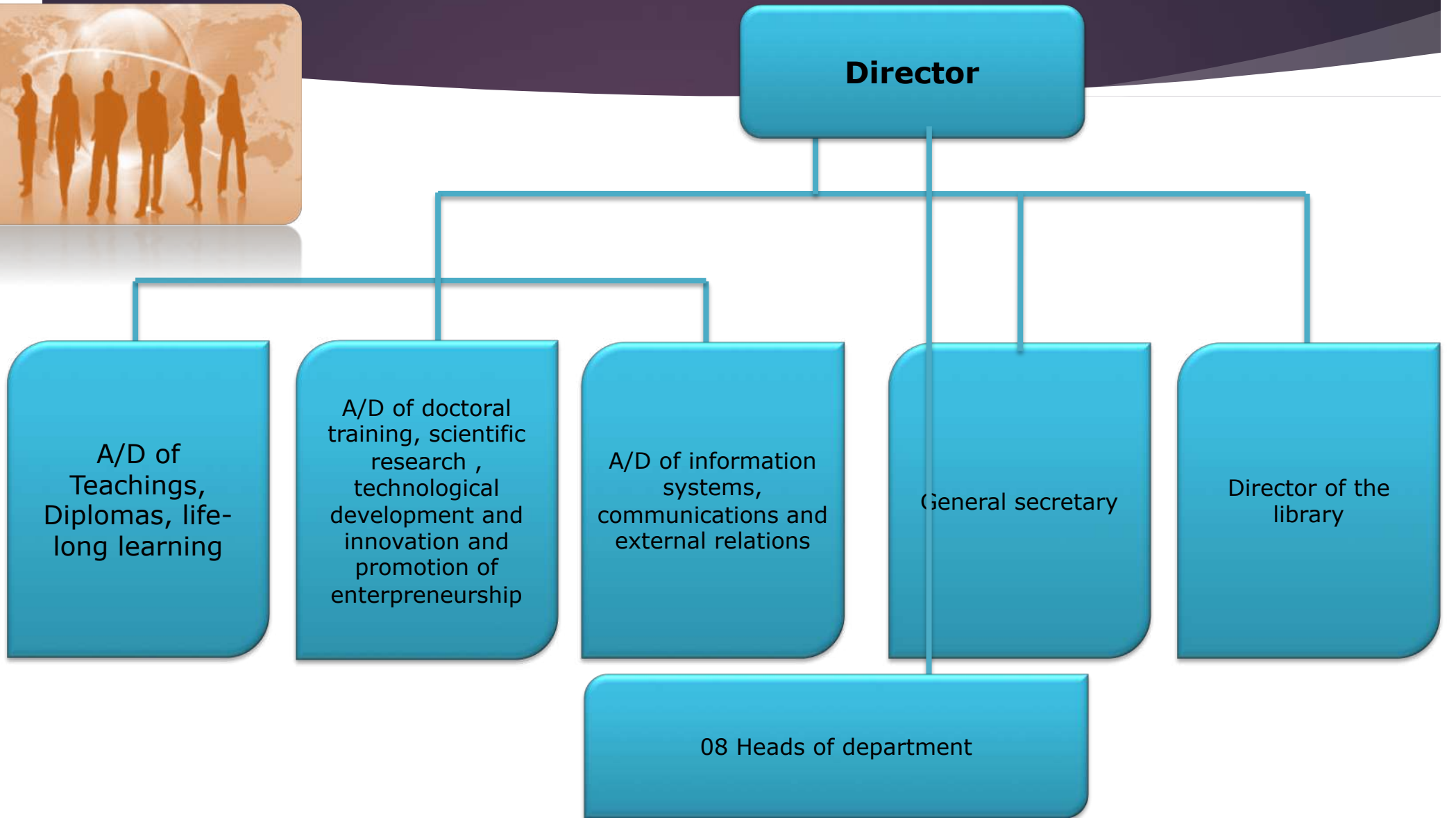
In 2017 : Baptisation of the school to the name of the Chahid Maurice Audin, by ministerial decree N°15 of february 7, 2017.

1240 Students

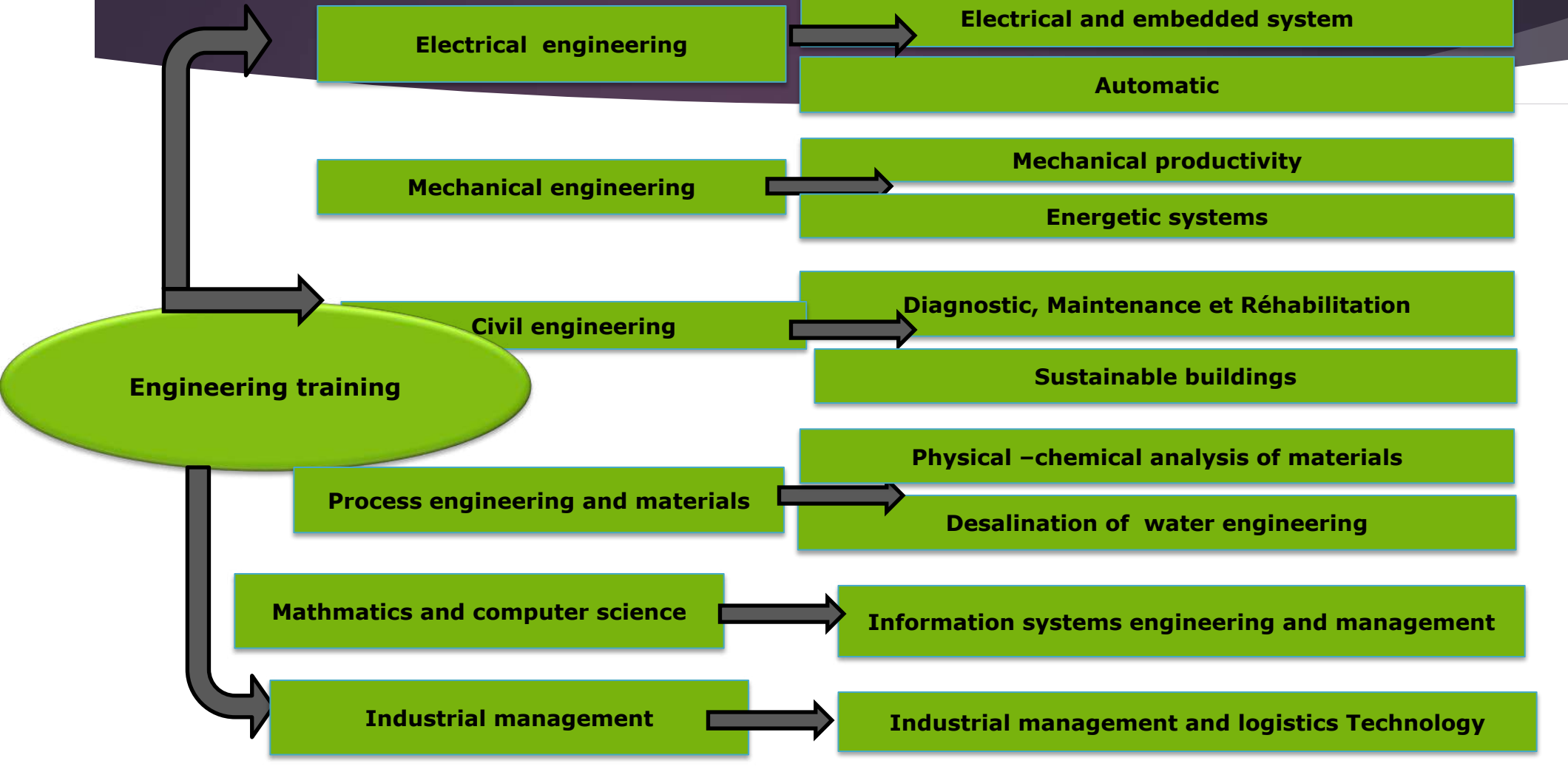
8 Departements

- Electrical engineering
- Mechanical engineering
- Civil engineering
- Process engineering
- Mathematics and computing science
- Industrial engineering
- Applied Languages
- Preparatory Classes in science and technology

Organigram of the school



Insured Training



The Degrees

Engineering Degree in the different Specialities + Master*

Bac +5

Total Staff of Graduated ENPO-MA: 274 (Promotions 2015,2016 et 2017)

Scientific Research

214 Researchers

41 Teams

09 **Laboratories**

CNEPRU-Project
Research – Training
111 Researchers

31 Projects

01 Physics Lab

01 Civil Engineering Lab

04 Mechanical Engineering Lab

03 Electrical Engineering Lab

The shool has entred into agreements with academic and researc institution in various countries ,the most recent of which are

POLITEHNICA UNIVERSITATEA DIN BUCUREȘTI 1818

SAJE MONTRÉAL
CENTRE d'excellence entrepreneurial

MINES Saint-Étienne

Université Nice Sophia Antipolis

utt
université de technologie Troyes

Ecole Nationale d'Ingénieurs de Tarbes
ENIT
Concevons l'avenir

UNIVERSITÉ DE REIMS CHAMPAGNE-ARDENNE

UNIVERSITE ABDOU MOUMOUNI
Karamin Sani kukumi Nèe

espe
École supérieure du professorat et de l'éducation Clermont-Auvergne

UNIVERSITE BLAISE PASCAL CLERMONT-FERRAND
UBP

INDUSTRIAL PARTNERS

Adwan
Adwan Chemical Industries Co. Ltd.

سوناطراك
sonatrach

sonatrach
Des réalisations & des engagements

KNAUF

Feraal

Hyproc Shipping Company

LAFARGE
Building better cities

SIEMENS

BOMARE COMPANY

CHAUDRAL spa

سفير
safir

CDER
مركز تنمية الطاقات المتجددة

SDH

OPGI
وهران

inapi
Institut National Algérien de la Propriété Industrielle

G.O.M.i
Groupement de l'Ouest en Maintenance Industrielle

Continuous training and service delivery

Continuous training and service delivery

L' ENPO-MA is empowered to organize training for the benefit of other sectors

A training was conducted for the benefit of the trainers of the sector of the Ministry of Training and Professional Education on the trades of metal construction, maintenance and industrial safety.

A training was conducted for the benefit on management of the Treasure direction of the Oran wilaya on accounting and finance

A specific training has been carried out for the benefit of the following company executives: SAFIR, HYPROC, CHAUDRAL,SEOR, ENAVA,……

Specialized post graduation training was conducted for company executives ALFON.

Other formations are being set up..

International Specialised Master

An agreement of cooperation has been signed between **Ecole des Mines de Saint Etienne - EMSE (France) ; l'Ecole Nationale Polytechnique d'Oran Maurice Audin (ENP-MA)** and **the NGO R 20-MED. A**n international Master specialised in the sustainable development was created and dedicated to industrial enterprises managers and local communities, has started on November 6, 2016, at l'ENPO-MA.

This training has the title **« Policy, Technology and Portfolio Financing Innovative Projects for the Green Economy ».**

This Master groups different partners , L'EMSE (France) the project initiator, L'ENPO-MA (Algeria), L'Université Senghor d'Alexandrie (Egypt) and l'ONG R 20-MED.

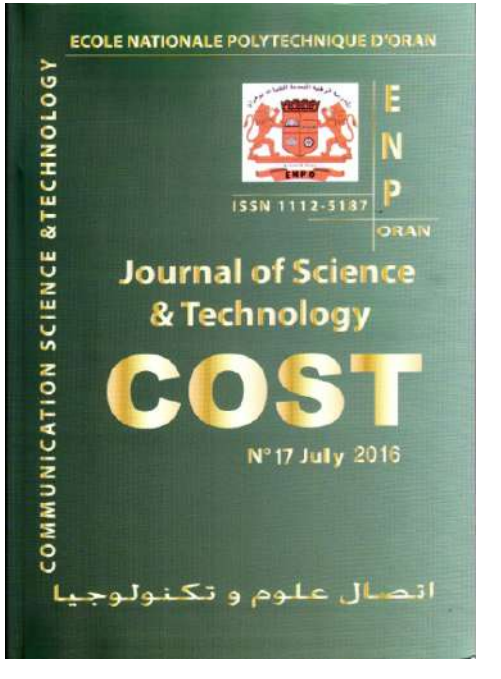
Publications

Journal of Science and Technology COST

The journal **COST** (Journal of Science and Technology) is an annual journal and is chracteristic of Technology, Science and Didactics.
It appeared, for the first time, in 1994 under the title « Bulletin de l'ENSET d'Oran » with 05 numbers. The journal **COST** Is the 18th .

The Newsletter Journal Polytech'Oran

The journal Polytech'Oran, once called« LIRENSET» is a quarterly newsletter that has been created since 2008 and appeared in 29 numbers (The 15th under the heading «LIRENSET» and the 14th has the title « Le Journal Polytech'Oran ».



Quality assurance
From theory to practice through self-evaluation

The implementation of higher education reforms in Algeria has established a new dynamic that has shaken up habits.

Like many other institutions in the country, ENPO-MA, has set about putting in place the tools, mechanisms and procedures for this quality to be translated into reality.

The effort will pay off because ENPO-MA will become a pioneer in the implementation of a quality approach in Algeria thanks to its involvement in the consortium that built the AQIUMED referential , which since become a worldwide reference.

The Pathway of Quality

Objectives

Acquire, reinforce and implement best practices to improve our services.

An opportunity was seized in 2009, which allowed the team to join a Tempus structural project AqiUmed to develop a reference framework for Maghreb universities. Since then, the school has grown steadily in the field of quality assurance. She developed:

- ***Training of resource persons,***
- ***Setting up a quality assurance cell QAC and a quality assurance responsible AQR***
- ***Acquire documentation and processing tools.***
- ***Ownership of a repository***

Performing an initial self-assessment

As part of AqiUmed, the school conducted a self-assessment on 3 key areas: training, research and governance.

➡ ***Maghrebin Repository validation seminar sep 2011***

➡ ***National Seminar of Restitution and Synthesis Sep 2012***

2015/2016: Two projects … ..

Evaluation of 04 transversal units common to all engineer training:

- *Oral and interpersonal communication.*
- *Professional writing.*
- *Management and project management.*
- *The target population is the 3rd year students in the 5 specialties of the GC (1), GM (1) and GE (3).*

➢ *Recommendations:*

- *Development of NIT*
- *Introduction of case studies in training*
- *Encourage student mobility*
- *Organization of conferences*

Review of programs and relevance of training offers

- *An evaluation of GE engineering degree programs took place among outgoing students, those in training, and teachers. The results reveal the need for revision of these programs, the review of the procedure for organizing internships and end of studies projects.*

- *Accompanying new teachers in their pedagogical training*

- *Elaboration of the quality charter and the code of deontology*

FIRST FALLOUT

A new paradigm:

- ***The results of the self-evaluation introduced a new paradigm in the school:***
- ***The concepts of quality assurance have become the subject of debate,***
- ***Proposals to improve the process come from teachers and students,***
- ***The willingness to do well is palpable with students and teachers and other staff of the school,***
- ***Seminar on governance***

Quality management

Continuous improvement

A follow-up self-assessment:

Since The ENPO has completed its initial self-assessment, it was important for it to build up and carry out a follow-up self-assessment to establish the continuous improvement loop in a sustainable way. In this regard, the ENPO has programmed for the year 2016-2017 different actions in this : improvement way

❑ ***Data collection tools:***

→ ***Questionnaires (07)***

- *training (student)*
- *training (teacher)*
- *training (administration)*
- *studient life in school (studient)*
- *enterprise*
- *doctoral studies*
- *governance*

Self-Assessment: Phase 1 - Data Collection

Emails

- *Students (620)*
- *Teacher (150)*
- *Administration (13)*
- *Firms (60)*

Visits et Interviews

- *Director*
- *Assistant Directors*
- *secretary general*
- *schooling service*
- *communication and statistics service*
- *personal service Teacher*

Accounting Services
Computing Center
cultural service
presidents of science clubs
student representatives

Self-Assessment: Phase 1 - Data Collection

Publication : - on the web site

- on the facebook pages

RESULTS ANALYSIS : SWOT Method

Throughout the implementation of the referential QA in the areas of training , student life at school and governance and whenever necessary, proposals for improving the mechanisms evaluated were made. It was the same for the strategic study of each field .

A compilation of the various strategic studies made throughout the operation by field of study has given rise to the tables below; recalling that the study is based on the SWOT method, which helps to reveal the strengths and weaknesses as well as the opportunities and threats to the entity under study.

STRENGTHS

- *Completed pedagogic infrastructure and diversified technological means*
- *Great diversity of programs and specialties*
- *Rich and varied documentation;*
- *Stable teaching team, and more young and dynamic*
- *Existence of a quality assurance unit;*
- *Existence of a training and monitoring unit for newly recruited teachers*
- *Pedagogical approach oriented employability, scientific and international mobility*
- *Very strong adherence of all actors (academics, students, graduates, professionals, communities) to the ENPO and its development.*
- *Massive adherence to the school's governance policy*
- *Quality real estate*
- *Good financial situation*
- *Professionalism and staff involvement*
- *Dynamic student life*
- *The student actor of his formation*
- *Diversified and innovative relationships with industry partners*
- *Important social opening*
- *Proven professional integration*

WEAKNESSES

Interns factors

- The practical work is insufficient and therefore it's
- to develop;
- Lack of follow-up of practical training
- Lack of visits
- Lack of skills referential
- Unskilled skills approach
- Engineering technical training to strengthen
- Lack of teaching evaluation by students;
- Lack of debate on pedagogy;
- Lack of supervision of masterful rank;
- Little mobility of PhD students abroad
- Digital pedagogy little explored
- Lack of European and other cooperation projects
- Few exploitation of international conventions
- An integrated information system to develop
- Emergence of tensions and conflicts between teachers in teaching teams

OPPORTUNITIES

Externs factors

- Strong demand for integration into the School by students t cycle (preparatory classes) and 2nd cycle (engineering fields)
- Opening of the School on new specialties
- An employment sector to supervise in the identification of needs
- Lifelong learning

- Establish quality assurance and strengthen human resources CAQ
- Modernize teaching tools and practices;
- Visibility of the training offer;
- Research ;
- Training of trainers;
- Digital pedagogy,
- International cooperation projects (European and others)
- Doctoral studies

THREATS

Externes factors

- Massification of sectors and specialties;
- Frequent technological change in programs taught
- Insufficient internet speed
- Lack of technical staff (laboratory engineers for maintenance and maintenance of equipment)
- Lack of clarity in the coaching process;
- Strong growth of competition nationally and internationally

Recommandations:

- ***- Ensure the continuity of the school's strategy;***
- ***Strengthen the governance or systematize the quality approach in all the activities of the School by relying on a global information system renovated and operational***
- ***Involve teachers more in vocational training (internships, exits ..)***
- ***Design training programs on the basis of a skills repository***
- ***Improve the website with a periodic update;***
- ***- Revitalize the quality assurance unit by involving resource persons from different departments***
- ***- To make the self-evaluation periodically in each of each department***
- ***- Define an annual action plan for sports and cultural activities***
- ***- Set up a school-enterprise liaison office for the placement, the follow-up of internships and the preparation of students for professional insertion***

CONCLUSION

- ***The ENPO-MA has set up a strategy for systematic evaluation steering, training (including the skills approach), support services but also partnerships.***
- ***The school communicate the results wisely and use them in their progress.***
- ***The school identifies its strengths and weaknesses and analyzes them periodically.***
- ***It establishes a corrective action plan that contribute to build the project establishment***
- ***It evaluates the impact of its approach, takes it into account in its action and publishes the results.***
- ***It ensures the transparency of the information provided to the general public:***
- ***the school gives itself the means to evaluate its communication policy in a process of continuous improvement***

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Thank You
Merci