## **Lessons from the courses for doctoral students:**

- Course: Mechanical Behavior of Metals and Alloys: Doctoral Training (3rd Cycle) entitled: Materials and Structures (Ministerial decree n: 935 of 31/07/2016)
- Course: **Description of plastic deformation of metals: Doctoral Training** (**3rd Cycle**) entitled: Metallurgy, (Ministerial decree n: 1434 of 21/08/2019)

## **Educational and Pedagogical Activities**

Year	The subjects taught	Department (University of Biskra)
2002-2003	Materials Science (MDS) 1st year DEUA (Course + TD)	Mechanical Engineering
2003-2004	Maths + (MDS) 1st year DEUA (Course + TD)	Mechanical Engineering
2004-2005	Continuum Mechanics: 3rd year Engineering (Course + TD) Equipment of Workshops on Thermal Treatments: 5th year Engineering (Course + TD)	Metallurgy
2005-2006	Continuum Mechanics: 3rd year Engineering (Course + TD) Equipment of Workshops on Thermal Treatments: 5 th year Engineering (Course + TD)	Metallurgy
2006-2007	Continuum Mechanics: 3rd year Engineering (Course + TD) Equipment of Workshops on Thermal Treatments: 5 th year Engineering (Course + TD)	Metallurgy
2007-2008	Continuum Mechanics: 3rd year Engineering (Course + TD) Equipment of Workshops on Thermal Treatments: 5 th year Engineering (Course + TD)	Metallurgy
2008-2009	Continuum Mechanics: LMD3 (Course + TD) Equipment of T.T. Workshops, Non-Ferrous Alloys, Methods of Analysis : 5 th year Engineering (Course + TD)	Metallurgy
2009-2010	Material Physics: Master1 (Course + TD) Equipment of T.T. Workshops, Non-Ferrous Alloys, Methods of analysis 5 th year engineering (Course + TD)	Mechanical Engineering
2010-2011	Physics1 + Physics2 : LMD 1 (Course + TD)	Architecture
2011 -2012	Physics1 + Physics2 : LMD 1 (Course + TD)	Architecture
	Physics1 + Physics2 : LMD 1 (Course + TD)	Architecture
2012 -2013	Continuum Mechanics (3 + Master1 LMD)  Metallurgy (Course + TD)  Thermal Treatment of Steels (LMD Master1 + 3)  Metallurgy (Course +T P)	Mechanical Engineering
	Physics1 + Physics2 : LMD 1 (Course + TD)	Architecture
2013 -2014	Continuum Mechanics (LMD Master1 3+)  Metallurgy (Course + TD)  Thermodynamics (LMD 3) Metallurgy (Course + TD)  Formatting metals (Master1) Metallurgy (Course + TD + TP)	Mechanical Engineering
2014 -2015	Continuum Mechanics (LMD 3) Metallurgy (Course + TD)	Mechanical Engineering

	Formatting metals / Thermal Treatment of Steel(Master2 / LMD3) Metallurgy (Course + TD + TP)	
2015 -2016	Mechanical Behavior of Metals and Alloys, 3LMD Metallurgy (Course + TD) Standardization in Metallurgy; 3LMD Metallurgy (Course) Materials Physics; Master1 Metallurgy (Course + TD) Continuum Mechanics (LMD Master1 3+) Formatting metals (Master1) Metallurgy (Course + TD + TP)	Mechanical Engineering
2016 -2017	Materials Physics; Master2 Metallurgy (Course + TD) Formatting metals (3LMD/Master2) Metallurgy (Course + TP)	Mechanical Engineering
2017-2018	Mechanical Behavior of Metals and Alloys, 3LMDMetallurgy (Course + TD)  Standardization in Metallurgy; 3LMD Metallurgyphysical (Course)  Formatting metals (Master2) Metallurgy (Course + TP)  Innovative Materials (Master2) Metallurgy (Course + TD)  Phase Balance (Master1) Metallurgy (Course + TD)	Mechanical Engineering
2018-2019	Mechanical Behavior of Metals and Alloys, 3LMDMetallurgy (Course + TD)  Standardization in Metallurgy; 3LMD Metallurgyphysical (Course)  Formatting metals (Master2) Metallurgy (Course + TP)  Innovative Materials (Master2) Metallurgy (Course + TD)  Phase Balance (Master1) Metallurgy (Course + TD)	Mechanical Engineering
2019-2020 until (29/12/2019)	Mechanical Behavior of Metals and Alloys, 3LMD Metallurgy (Course + TD) Formatting metals (Master2) Metallurgy (Course + TP) Innovative Materials (Master2) Metallurgy (Course + TD) Phase Balance (Master1) Metallurgy (Course + TD)	Mechanical Engineering
2019-2020 from (30/12/2019)	Proba-stat, 2LMD ST (Course+TD) Numerical Methods2LMD ST (Course+TD)	ST-Department (University of Batna2)
2020-2021	Proba-stat, 2LMD ST (Cours+TD) Numerical Methods2LMD ST (Cours+TD)	ST-Department (University of Batna2)
2021-2022	characterization techniques: Master 1 (TP) Aging and degradation of materials: Master 1 (Course+TP) Elaboration of materials: Master 1 (TP)	Industrial Engineering Department -process engineering (University of Batna2)