Racem MELLOULI

PhD. Eng. in **Industrial Engineering**
(Major: Optimization and Reliability of Systems) from the University of Technology ofTroyes, France

Assistant Professor, HDR

Ex- Consultant of " Logistics Modeling & Optimization" at Newton Vaureal Consulting, Paris (France)

Tunisian, born in Sfax on September 15, 1978. Married.
Research Lab: MODILS (Modeling and Optimization of Decision Industrial and LogisticsSystems), University of Sfax -Tunisia.
✉: racem.mellouli@fsegs.usf.tn ☎: **(Whatsup) (TN) +216 20 400 135, (KSA) +966561708167**
https://scholar.google.com/citations?user=oTAeKbUAAAAJ&hl=en&oi=ao **Scopus ID: 23974778700**

EDUCATION AND QUALIFICATIONS

2025: University Habilitation degree in Management Sciences, specialty: Logistics & Production, Sfax University: Eligibility for Associate Professor positions in Tunisia. Defense date: June 12, 2025

2008: Qualification in section 61* of the CNU France (4-year validity, not renewed)

Eligibility for permanent university positions (MCF, equivalent to Senior Lecturer) in France in section 61 including "Supply-Chain, Logistics, Production, Operations Management, Industrial Engineering, Engineering Management, Decision-Aid and Operations Research" (see details in CNU61_Link) of the National Council of Universities (CNU) of France (qualification decision published in official JORF_link)

2004-2007: 3-year Mandatory Pedagogy Training Program for teaching in higher education for University Monitors (teachers), CIES Paris-Jussieu France + IUFM Troyes France

2007: PhD, specialty "Optimization and Reliability of Systems", University of Technology of Troyes UTT France**

Specialty Discipline: Industrial Engineering and Engineering Management, Operations Management, Operations Research, Decision Engineering [link1, link2, link3]

PhD Project: "Operations scheduling on parallel machines under availability constraints".

Directors: Pr Chengbin Chu and Dr Cherif Sadfi.

Laboratory: LOSI - Laboratory of Optimization of Industrial Systems

Jury: Philippe Baptiste, Pierre Borne, Jacques Carlier, Chengbin Chu, Mohamed Haouari, Imed Kacem, Marie-Claude Portmann and Cherif Sadfi.

Defense date: December 18, 2007 at the University of Technology of Troyes (UTT, France)

2004: M.Sc. in Industrial Systems, EDSYS at LAAS of CNRS, Toulouse France

University Paul Sabatier Toulouse III

Courses at Doctoral School of Systems (EDSYS) at Laboratory of Analysis and Architecture of Systems (LAAS of CNRS), Toulouse France

Master Project: "Implementing information technologies and AI to improve the performance of proactive maintenance control and planning.", rank 3

Directors: Xavier Desforges and Bernard Grabot

Department of Industrial Engineering, Laboratory of Production Engineering (LGP) at the National College of Engineers of Tarbes, Toulouse France

2001: B.Sc. (5-year Engineer's degree) in Industrial engineering, ENIT Tunisia

National College of Engineers of Tunis (ENIT Tunisia). Department of Industrial Engineering. Basis: decision engineering, operations management, operations research, production, logistics & supply-chain, maintenance, project, quality, quantitative analytics, dataprocessing, informatics, information systems, artificial intelligence.

1996-1998: Preparatory studies for engineering schools, IPEST Tunisia

Preparatory Institute for Scientific and Technical Studies (IPEST) - La Marsa, Tunisia (A pilot institute for mathematics graduates who receive only the highest honors).

1996: Baccalaureate of Mathematics with the highest honors, Tunisia

---

* section-61 ** Optimisation et Sureté des Systèmes (UTT degree straddling Industrial Engineering and Computer Science departments)

PROFESSIONAL EXPERIENCE:

Academic Experience:

Sept 2025 – Present: **Northern Border University, College of Engineering, KSA** (Secondment, contract): Detachment from the University of Sfax Tunisia

- **Position**: Contractual Assistant Professor in the department of Industrial Engineering.

Feb 2022 – Present: University of Sfax - Faculty of Economics and Management (FSEG), Sfax Tunisia (Permanent)

- **Position**: Assistant Professor of Logistics, Operations Management and Operations Research in the department of Quantitative methods.
- **Mission(s):** Member of the committee for the research master's in 'Operations Management and Logistics' (GOL), vice-coordinator of the master.

Sept 2014 – June 2021: Umm Al-Qura University, College of Engineering of Al-Qunfudhah, KSA (Secondment, contract): Detachment from the University of Sfax Tunisia

- **Position**: Contractual Assistant Professor in the department of Industrial Engineering.
- **Mission(s):**
  - Assistant Professor of Industrial Engineering
  - Head of the Industrial Engineering Department (May 2017 – Jun 2018)
  - Member of Course Assignment and Timetabling committee, main advisor and member of IE study plan committee, among other academic missions.

Jan 2014 – Aug 2014: North American Private University - International Institute of Technology (IIT), Sfax Tunisia (Consultant)

- **Position(s):** Consultant and lecturer, Head of Industrial Engineering Department, and pedagogy advisor
- **Mission(s):**
  - Head of Industrial Engineering Department, Assistant Professor of Industrial and Decision Engineering.
  - Restructuring and improving the existent IE study program,
  - Designing and submitting for the ministry a new 3-year IE study plan (BSc program) with option: "Decision and Industrial Systems Engineering" with 900 course-hours per year, aligned with Tunisian, European and North American " Grande École" (elite) standards,
  - Preparing a Research Master's program "Informatics and Decision" in partnership with the University of Lorraine, Metz France (a double-graduation formula).

Sept 2008 – Jan 2022: University of Sfax - Higher School of Business (ESC), Sfax Tunisia (Permanent)

- **Position(s):** Assistant Professor of Operations Management (Quantitative methods), at the department of Economics, Computer Sciences and Quantitative Methods.
- **Mission(s):**
  - Pedagogical responsible of the professional master's in business informatics (option "e-Commerce") since sept 2011(initiator of corresponding master's study program).

Oct 2004 - Feb 2008: University of Technology of Troyes, Troyes, France (Contractual)

- **Position(s):**
  - 1-year ATER contract (attached temporary for teaching and research, equivalent to "Teaching Assistant")
  - 3-Year University Monitor contract + 3-Year Research Allocation Beneficiary contract
- **Mission(s):**
  - Teaching assistant in the Department of Industrial Systems Engineering of UTT,
  - Researcher at the laboratory of Logistics and Optimization of Industrial Systems (LOSI): Modeling and implementation, in C++/ ILOG Cplex, to build optimization algorithms for production scheduling.

Feb 2004 - July 2004: Laboratory of Production Engineering (LGP), ENIT Tarbes, France (Internship)

- **Position:** Research Assistant (M. Phil research internship) at the Laboratory of Production Engineering (LGP).
- **Mission:** improving proactive maintenance decisions and knowledge-based intelligent maintenance software by implementing tools of artificial intelligence and information technologies.

Industry and Consultancy Experience:

Feb 2008-July 2008: Newton Vaureal Consulting (NVC), Paris, France

NVC: A consultancy firm for designing and optimizing complex logistics and supply-chain solutions

- **Position:** Expert consultant of Logistics Modeling & Optimization.
- **Missions:** Building solutions for logistics networks design and planning (completed missions: DHL, Partner Jouets, ATAC)

Sept-2001 à Août-2003: CHAHIA industrial company of meat products, Sfax, Tunisia

- **Positions:**
  - Director of operations (COO): 2003
  - Head of Information System and Management Control: 2002
  - Head of Production Management Systems: 2001
- **Missions (success story):**

  Production:
  - Organization of production and implementation of a monitoring system (daily production reports, stock in/out movement sheets, various forms of the factory's paper-based information system).
  - Resizing of production units and implementation of a labor allocation plan.
  - Preparation for the installation of a new weighing system based on smart instrumentation and an acquisition system interfaceable with the current IT system: perspective of a new ERP system with a real-time and rolling horizon approaches.

  Factory Expansion Project:
  - Monitoring the various investment and factory upgrading phases.
  - Participation in the design phase of the factory expansion project with the CECIA France team.
  - Involvement in the selection of new equipment and administrative/logistical follow-up of import operations.
  - Participation in the monitoring of the factory's expansion, modernization of processes, and reconfiguration of workshops.

  Information System:
  - Implementation of a new information system and configuration of a new ERP (Adonix SAGE) with the collaboration of the specialized STAR ERP consultancy team (modules for sales, procurement, inventory, production, maintenance, accounting, and payroll), and Administration of the IT network and preparation for the integration of the Lotus Notes communication platform (not supported by the ERP).
  - Setup of a fleet management system and management of crate returns using MS Access (not supported by the ERP).

  Institution of management and control methods:
  - Segmentation of costs and calculation of product cost prices of (preparation for the implementation of the analytical management accounting).
  - Development of an initial management procedures manual model with the establishment of control systems (focusing on the management of the sales department and the production department).
  - Creation of an initial model of decision support dashboards (focusing on the sales module, production module, and poultry farming management centers).
  - Planning of procurement and sales, and implementation of a budget planning system.

2001 (5 months): SIEGAZ, a subsidiary of de TOTAL TUNISIA (Gas Industry),Rades Tunisia

- **Position:** Graduation Project Internship
- **Missions:**
  - Developed a proactive management system for maintenance,
  - Implemented a maintenance information system and authored an exhaustive procedures manual for maintenance operations and control system.
  - Developed a "Computer-Aided Maintenance Management" software (GMAO in French), incorporating modules for preventive operations planning and spare-piece inventory management.

2000 (1 month): Tunisian Company of Food Products- Group AFFES STPA, Sfax Tunisia

- **Position:** Engineer Internship
- **Mission:** Development of database-based software for machinery management of ALCO-STPA.

1999 (1 month): Industrial company producing shoes WEEKEND, Sfax-Tunisia

- **Position:** Enterprise discovery Internship
- **Mission:** Analysis of the technical and administrative structure of the company.

TEATCHING EXPERIENCE

Teachings from 2025 to today (2025-Term1) Northern Border University (EC), Northern Borders, KSA

Introduction to Computer Programming (C++)	2rd-Year level 3 of Eng.-NBU-EC	**Autumn 2025 (42 itht hours)**
Industrial Information System Design	3rd-Year level 5 of I Eng.- NBU-EC	**Autumn 2025 (42 itht hours)**
Manufacturing Economics (Cost Accounting & Production Economics)	4rd-Year level 7 of I Eng.- NBU-EC	**Autumn 2025 (42 th hours)**
Risk Management in Logistics & Supply-Chain	M2 level of MSc in SRM - NBU-EC	**Autumn 2025 (42 th hours)**
Transportation Systems Safety	M2 level of MSc in SRM - NBU-EC	**Autumn 2025 (42 th hours)**

Teachings from 2022 to 2025 Faculty of Economics and Management (FSEG), Sfax, Tunisia

Production Scheduling (Ordonnancemnt de la production)	2rd-Year level of LMIS in IIT-NAU	**Spring 2025 (30 th hours)**
Production Management	2rd-Year level of LBA in ISB-NAU	**Spring 2025 (30 th hours)**
Operations Management (Gestion des Operations)	3rd-Year level of BSc in LP FSEG	**Spring 2022 (42th hours)** **Spring 2023 (42th hours + 21 LAB)** **Spring 2024 (42th hours)**
Operations Management (in English)	M1 level of MSc in LOM, FSEG	**Autumn 2022 (42th hours)**
Logistic Networks Optimization (Optimisation des réseaux logistiques)	3rd-Year level of BSc in LP FSEG	**Spring 2022 (42th hours)** **Spring 2023 (42th hours)** **Spring 2024 (42th hours)** **Spring 2025 (42th hours)**
Optimization I (Optimisation I)	M1 level of MSc in QA, FSEG	**Autumn 2023 (42th hours)**
Optimization II (Optimisation II)	M1 level of MSc in QA, FSEG	**Spring 2022 (42th hours)** **Spring 2023 (42th hours)**
Operations Research II (Recherche Operationnelle II)	M2 level of MSc in LOM, FSEG	**Autumn 2023 (42th hours)**
Optimization in risk management and insurance (Optimisation appliquée en assurance et gestion du risque)	M1 level of MSc in ARM, FSEG	**Spring 2023 (21th hours)** **Spring 2024 (21th hours)** **Spring 2025 (21th hours)**
Software applications for Operations Optimization (C++, Cplex) (Applications logicielles pour l' optimisation des opérations via C++, Cplex)	M2 level of MSc in LOM, FSEG	**Autumn 2022 (42th hours)** **Autumn 2023 (42th hours)**

Teachings from 2021 to 2022 Higher School of Business (ESC), Sfax,Tunisia

E-Logistics (E-logistique)	3-Year level – ESC	**Autumn 2021 (42th hours)**
Innovation and competitiveness (Innovation et compétitivité)	3-Year level – ESC	**Autumn 2021 (42th hours)**

Teaching from 2014 to 2021 – Umm Al-Qura University (Qunfudhah College of Eng.), KSA:

Strategic Planning/industrial scheduling	level 8 of IE BSC	**Autumn 2014 (42th hours)**
Logistics and Supply-Chain Management	level 10 of IE BSC	**Spring 2017** (42h TH) **Spring 2018** (42h TH) **Spring 2019** (42h TH) **Autumn 2019** 2×(42h TH)
Engineering Economics and Cost Accounting	level 5 of IE BSC	**Autumn 2014** (42h TH)
Statistical Quality Control	level 7 of IE BSC	**Autumn 2015** (42h TH) **Autumn 2016** (42h TH)
Operations research 1	level 5 of IE BSC	**Autumn 2015** (42h TH)
Operations Research 2	level 7 of IE BSC	**Autumn 2015** (42h TH) **Autumn 2016** 2×(42h TH) **Autumn 2017** 2×(42h TH) **Spring 2018** (42h TH) **Autumn 2018** 2×(42h TH) **Autumn 2019** 2×(42h TH) **Spring 2020** (42h TH) **Autumn 2020** (42h TH)
Project Management	level 9 of IE BSC	**Autumn 2016** (42h TH)
Industrial Safety Engineering	level 6 of IE BSC	**Spring 2015** (42h TH)
Selected topic seminar in Engineering Management (Planning, Scheduling, decision techniques)	levels 9-10 of IE BSC	**Spring 2018** (42h TH) **Spring 2019** (42h TH)
Selected topic seminar in Manufacturing (Data Science for Industry 4.0)	levels 9-10 of IE BSC	**Spring 2019** (42h TH)
Engineering Computational Methods/Matlab programming	levels 6 of IE BSC	**Spring 2015** (28 TH + 42h LAB) **Spring 2016** 2×(28h TH+ 42 LAB) **Spring 2017** (42h TH +2×42 LAB)
Industrial Systems Simulation/Matlab, Simulink	levels 8 of IE BSC	**Spring 2016** (28h TH + 42 LAB) **Spring 2017** (42h TH +2×42 LAB) **Spring 2018** (42h TH +2×42 LAB) **Spring 2019** 2×(42h TH +42 LAB) **Autumn 2019** (42h TH+ 42 LAB) **Spring 2020** 2×(42h TH +42 LAB) **Autumn 2020** (42h TH+ 42 LAB) **Spring 2021** 3×(42h TH +42 LAB)
Computer programming applications in IE	levels 8 of IE BSC	**Autumn 2018** 2×(42h TH+42LAB) **Autumn 2020** 3×(42 LAB)
Graduation Project 1	levels 9 of IE BSC	**Autumn 2016** (42h TH : 1 Project) **Autumn 2017** (42h TH: 2 Projects) **Autumn 2018** (42h TH : 1 Project) **Autumn 2019** (42h TH : 1 Project) **Autumn 2020** (42h TH: 2 Projects)
Graduation Project 2	levels 10 of IE BSC	**Spring 2017** (42h LAB : 1 Project) **Spring 2018** (42h LAB: 2 Projects) **Spring 2019** (42h LAB : 1 Project) **Spring 2020** (42h LAB : 1 Project) **Spring 2021** (42h LAB : 2 Projects)

Teachings from 2013 to 2014 – International Institute of Technology (IIT), Tunisia

Industrial Systems Engineering 1 (Planning and Scheduling) (Ingénierie des Systèmes Industriels 1: Planification et Ordonnancement)	4 year level – IIT	**Spring 2014 (42th hours)**

Teachings from 2008 to 2014 – Higher School of Business (ESC), Tunisia

Operations Research 1 (Recherche opérationnelle 1)	3-Year level – ESC	**Spring 2014 (42th hours)** **Spring 2013 (42th hours)** **Spring 2012 (42th hours)** **Spring 2011 (42th hours)** **Spring 2010 (42th hours)**
Advanced Decisional algorithms (with C/C++/C#) (Algorithmes Décisionnels Avancés)	M1 Pro-ESC	**Spring 2014 (42th hours)** **Spring 2013 (42th hours)** **Spring 2012 (42th hours)**
Programming Workshop I (C language) (Atelier de programmation I (langage C))	1-Year level – ESC	**Autumn 2010 (21th hours , 21LAB)** **Autumn 2009 (21th hours , 21LABx2)** **Autumn 2008 (21th hours , 21LABx2)**
Programming Workshop II (C language) (Atelier de programmation II (langage C))	1-Year level – ESC	**Spring 2011 (21th hours , 21LAB)** **Spring 2010 (21th hours , 21LAB)** **Spring 2009 (21th hours , 21LAB)**
Distribution logistics (decisions & technologies) (Logistique de distribution : décisions & technologies)	M2 Pro-ESC	**Spring 2014 (42th hours)** **Spring 2013 (42th hours)** **Spring 2012 (21th hours)** **Spring 2011 (21th hours)**
Supply-chain management (Management de la chaîne logistique)	M2 Pro –ESC	**Spring 2010 (21th hours)** **Spring 2009 (21th hours)**
Supply-chain design (Conception de la chaîne logistique)	M2 Pro –ISTLS	**Autumn 2011 (21 C)**
Optimization and Stochastic Processes (Optimisation et Processus stochastiques)	M2R – ESC	**Autumn 2013 (21th hours)** **Autumn 2012 (21th hours)**
Computer-Aided Production Management (Gestion de Production Assistée par Ordinateur)	3-Year level – ESC	**Autumn 2013 (42th hours)** **Autumn 2012 (42th hours)** **Autumn 2011 (42th hours)** **Autumn 2010 (42th hours)**
Sales Information System – ERP (Systèmes d'information commercial – ERP)	M2 Pro – ESC	**Autumn 2013 (31.5C)** **Autumn 2012 (31.5C)**
Mathematics (Mathématiques)	1-Year level – ESC	**Autumn 2009 (42th hours)** **Autumn 2008 (42th hours)**
Linear programming (Programmation linéaire)	1-Year level – ESC	**Spring 2010 (21th hours, 21LABx 2)** **Spring 2009 (21LABx 2)**
Project management (scheduling) (Gestion de projet)	3-Year level – ESC	**Autumn 2011 (21th hours, 21LABx2)** **Autumn 2010 (21th hours, 21LABx2)**
Production methods (Méthodes de production)	M1 Pro-ESC	**Spring 2013 (21th hours)** **Spring 2012 (21th hours)** **Spring 2011 (21th hours)**
Decision-support models (Modèles d'aide à la décision)	M2 Pro –ESC	**Spring 2010 (21th hours)**
Decision support and multi-criteria methods (Aide à la décision et méthodes multicritères)	M2 Pro –ESC	**Spring 2010 (21th hours)**
Application of OR in management pbs (in english) (Application de la RO aux pbs de gestion)	3-Year level – FSEG	**Spring 2011 (42th hours)** **Spring 2010 (42th hours)**
Modeling and Optimization (Modélisation et Optimisation)	M2 R-FSEG	**Spring 2011 (42th hours)**
Operational Methods for Decision-Support (Méthodes Opérationnelles d'Aide à la Décision)	3-Year level – IHEC	**Autumn 2010 (42 C)**
Forecasting techniques (Techniques de prévision)	2-Year level – ESC	**Spring 2009 (21th hours)**

Teachings from 2005 to 2008, University of Technology of France (UTT), France

MT21	Mathematics, "functions of real variable" (Mathématiques, ``fonctions d'une variable réelle")	**Spring 2005 (51 hLAB), Autumn 2005 (51 h LAB).**
MT14	Operations Research (Recherche Opérationnelle)	**Spring 2006 (34 h LAB).**
NF05	Introduction to C programming language (Introduction au langage C)	**Autumn 2006 (28 h LAB).**
CS01	Value Analysis and Functional Analysis (Analyse de la valeur, Analyse fonctionnelle)	**Spring 2007 (34 h LAB).**
GP06	Production Management (Gestion de production)	**Autumn 2007 (34 h LAB).**

Publications

2025	[41]	Chalgham, M., Mellouli, R., 2025. Including Extended Cost models and Vehicle Use Restrictions for New Realistic Variants of the Split Delivery Vehicle Routing Problem. Lecture Notes in Operations Research (*in press*), selection from International Conference of the Tunisian Operational Research Society (IC_TORS 2025), Sousse, Tunisia, April 11–13. Publisher: SPRINGER.	Scopus	Book series Chapt.
2025	[40]	Mellouli, A., Wafi, C., Mellouli, R., 2025. An efficient Ant Colony Optimization-based heuristic for the single machine scheduling with sequence-dependent setup times. Lecture Notes in Mechanical Engineering, LNME eBook series 11693: 179-188, DOI: https://doi.org/10.1007/978-3-031-89733-7819, SCOPUS, (SJR 0.168 H-index 35, Q4), Publisher: SPRINGER, Cham.	Scopus SJR (Q4)	Book series Chapt.
2024	[39]	Mellouli, A., Mellouli, R., Triki, H., Masmoudi, F., 2024. An efficient hybridization of Ant Colony Optimization and Genetic Algorithm for an Assembly Line Balancing Problem of type II under zoning constraints. Annals of Operations Research, 1: 1-33, DOI: https://doi.org/10.1007/s10479-024-06071-9, SCOPUS,(SJR 1.02 H-index 125, Q1), ISI WOS (JCR, IF=4.8), Publisher: SPRINGER	Scopus WOS SJR (Q1) JCR	Journal
2024	[38]	Ben Rebah, O., Elloumi, A., Mellouli, R., 2024. Advances in cutting & packing problems: A systematic literature review and future directions. Asian Journal of Management and Commerce, 5(1):98-105.		Journal
2023	[37]	Ben Rebah, O., Elloumi, A., Mellouli, R., 2023., A Real-Case Scheduling of Cutting Stock Operations as a Two-Stage Hybrid Flow Shop Problem with Eligible and Common Machines and Job Position Constraints, IEEE Afro-Mediterranean Conference on Artificial Intelligence (AMCAI 2023), DOI: 10.1109/AMCAI59331.2023.10431529, SCOPUS, Publisher : IEEE.	Scopus WOS	IEEE proc. conf.
2023	[36]	Jellab, A., Elloumi, A., Mellouli, R., 2023, Optimizing the Maintenance Planning for Water Distribution Networks : new model extensions, Conférence Internationale sur les Sciences Appliquées et l'Innovation (CISAI 2023), Sousse, Tunisie, July 10-11.		Conf.
2023	[35]	Jellab, A., Elloumi, A., Mellouli, R., 2023, Maintenance Planning of Water Distribution Network, International Conference on Intelligent Systems & Pattern Recognition (ISPR 2023), Yasmine Hammamet, Tunisia, May 11-13.		Conf.
2021	[34]	Louati, A., Lahyani, R., Aldaej, A., Mellouli, R., Nusir, M., 2021, Mixed Integer Linear Programming Models to Solve a Real-Life Vehicle Routing Problem with Pickup and Delivery. Applied Sciences, section "Transportation and Future Mobility". 2021, 11, 9551.	Scopus WOS SJR (Q2)	Journal

		https://doi.org/10.3390/app11209551, SCOPUS, (SJR 0.49 H-index 101, Q2), ISI WOS (JCR, IF=2.7), Publisher : MDPI	JCR	
2019	[33]	Mellouli, A., Mellouli, R., Masmoudi, F., 2019, An innovative Genetic Algorithm for a multi-objective optimization of two-dimensional Cutting-Stock problem, Applied Artificial Intelligence - Journal. 33 (6), 531-547, https://doi.org/10.1080/08839514.2019.1583857, SCOPUS, (SJR 0.49 H-index 60, Q3), ISI WOS (JCR, IF=2.8), DBLP, Publisher: TAYLOR & FRANCIS	Scopus WOS SJR (Q3) JCR	Journal
2017	[32]	Naji, W., Masmoudi, M., Mellouli, R., 2017, A robust-MILP for synchronized-mTSPTW: Application to home health care under uncertainties, IEEE proceedings, 4th International Conference on Control, Decision and Information Technologies (CoDIT 2017) , 1089-1094, ISBN: 978-1-5090-6465-6, DOI: 10.1109/CoDIT.2017.8102744, SCOPUS, DBLP, Publisher : IEEE	Scopus WOS	IEEE proc. conf.
2015	[31]	Daoud, I., Mellouli, R., 2015, Network design and planning with resource pooling: The context of merging two logistics entities, IEEE proceedings, 10th IEEE Int. Conf. on Service Operations and Logistics, and Informatics (SOLI 2015) - In conjunction with ICT4ALL 2015, 24-30, ISBN: 978-1-4673-8480-3, DOI: 10.1109/SOLI.2015.7367622, SCOPUS, DBLP, Publisher: IEEE	Scopus WOS	IEEE proc. conf.
2015	[30]	Bouaziz, S.G., Mellouli, R., Dammak, A., Al-Hassan, M., 2015, New variants of the covering location problem: Modeling and a two-stage genetic algorithm, IEEE proceedings, 2nd World Symposium on Web Applications and Networking (WSWAN 2015), 1-6, ISBN: 978-1-4799-8172-4, DOI: 10.1109/WSWAN. 2015.7210320, SCOPUS, (SJR H-index 11), Publisher: IEEE	Scopus WOS SJR	IEEE proc. conf.
2014	[29]	Masmoudi, M., Mellouli, R., 2014, MILP for synchronized-mTSPTW: Application to home healthcare scheduling, IEEE Proceedings, International Conference on Control, Decision and Information Technologies (CoDIT 2014), 297-302 , ISBN: 978-1-4799-6773-5, DOI: 10.1109/CoDIT.2014.6996910, SCOPUS, (SJR H-index 10), DBLP, Publisher : IEEE	Scopus WOS SJR	IEEE proc. conf.
2014	[28]	Taieb, N.H., Mellouli, R., Affes, H., 2014, Impact of means and resources pooling on supply-chain management: Case of large distribution, IEEE proceedings, International Conference on Advanced Logistics and Transport (ICALT 2014), 160-166, ISBN: 978-1-4799-4839-0, DOI: 10.1109/ICAdLT .2014.6864111, SCOPUS, (SJR H-index 7), DBLP, Publisher : IEEE	Scopus WOS SJR	IEEE proc. conf.
2013	[27]	Mellouli, R., Kacem, I., Sadfi, C., Chu, C., 2013, Lagrangian relaxation and column generation-based lower bounds for the Pm, hj1||∑ wiCi scheduling problem, Applied Mathematics and Computation - Journal, 219 (22) 10783-10805, DOI: https://doi.org/10.1016/j.amc.2013.05.004, SCOPUS, (SJR 0.96 H-index 166, Q1), ISI WOS (JCR, IF=4), DBLP, Publisher: ELSEVIER	Scopus WOS SJR (Q1) JCR	Journal
2013	[26]	Chaabane, N., Mellouli, R., Masmoudi, F., 2013, Evolutionary Metaheuristic Based on Genetic Algorithm: Application to Hybrid Flow Shop Problem with Availability Constraints, Metaheuristics for Production Scheduling (Book Chapter), 127-151, ISBN: 9781848214972, DOI: https://doi.org/10.1002/ 9781118731598.ch6, SCOPUS, Publisher: WILEY	Scopus	Book Chapter
2013	[25]	Zribi, H., Mellouli, R., Kacem, I., 2013, Lower bounds and an enhanced greedy heuristic for the single processor scheduling with release dates, IEEE proceedings, International Conference on Control, Decision and Information Technologies, CoDIT 2013, 835-841, ISBN: 978-1-4673-5549-0, DOI: 10.1109/CoDIT.2013.6689651, SCOPUS, (SJR H-index 11), Publisher : IEEE	Scopus WOS SJR	IEEE proc. conf.

2013	[24]	Moalla, F., Mellouli, R., Chabchoub, H., 2013, A new realistic modeling approach for two-echelon logistics network design, IEEE proceedings, 5th International Conference on Modeling, Simulation and Applied Optimization, ICMSAO 2013, 1-6, ISBN: 978-1-4673-5812-5, DOI: 10.1109/ICMSAO.2013.6552554, SCOPUS, (SJR H-index 12), Publisher: IEEE	Scopus WOS SJR	IEEE proc. conf.
2013	[23]	Driss, E., Mellouli, R., Hachicha, W., 2018, Mixed Integer Programming for Job Shop Scheduling Problem with Separable Sequence-Dependant Setup Times, American Journal of Mathematical and Computational Sciences. 3 (1) 31-36. Publisher: AASCIT		Journal
2013	[22]	Chaabane, N., Mellouli, R., Masmoudi, F., 2013, Métaheuristique évolutionnaire à base d'algorithme génétique : application au problème Flow-Shop Hybride en présence d'indisponibilités. Métaheuristiques pour l'ordonnancement de la production. Publisher : HERMES LAVOISIER (Book Chapter)		Book Chapter
2013	[21]	Bouhouch, I., Elloumi, A., Mellouli, R., 2013, A combined problem of planning and scheduling in rolling horizon of surgical operating rooms: A case study with two-parallel operating rooms and limited resources, International Conference of Artificial Intelligence, ICAI 2013, Sousse Tunisia, June 22-24.		Conf.
2013	[20]	Louati, A., Mellouli, R., 2013, Mixed Integer Programming models to solve a rich and real-life Vehicle Routing Problem with pickup and delivery, International Conference of Artificial Intelligence, ICAI 2013, Sousse Tunisia, June 22-24.		Conf.
2012	[19]	Chbichib, A., Mellouli, R., Chabchoub, H., 2012, Profitable vehicle routing problem with multiple trips: Modeling and variable neighborhood descent algorithm, American Journal of Operational Research, 2 (6), 104-119, ISSN: 2324-6537, DOI: 10.5923/j.ajor.20120206.04, Scholar Google, J-Gate, CrossRef, Publisher: SAP		Journal
2012	[18]	Chaabane, N., Mellouli, R., Masmoudi, F., Chu, C., 2012, MILP methods for the S-stage flexible flow shop scheduling problem, International Journal of Modelling in Operations Management, 2 (2), 138-152, ISSN: 2042-4094, DOI: https://doi.org/10.1504/IJMOM.2012.046337, Scholar Google, J-Gate, Gale, Publisher: INDERSCIENCE		Journal
2012	[17]	Chaabane, N., Mellouli, R., Masmoudi, F., Chu, C., 2012, Metaheuristic for S-stage Flexible Flow Shop scheduling problem with availability constraints, 4th International Conference on Metaheuristics and Nature Inspired Computing- META'2012, Sousse Tunisia, October 27-31.		Conf.
2012	[16]	Chbichib, A., Mellouli, R., Chabchoub, H., 2012. A Variable Neighborhood Descent Heuristic for the Profitable Vehicle Routing Problem with Multiple Trips", 4th International Conference on Metaheuristics and Nature Inspired Computing - META'2012, Sousse Tunisia, October 27-31.		Conf.
2012	[15]	Chbichib, A., Mellouli, R., Chabchoub, H., 2012, A Profitable Vehicle Routing Problem with Multiple Trips: Models, Solution Approaches and Case study", 5th research days "recherche opérationnelle et aide à la decision" ROAD-2012, Djerba Tunisia, October 10-11.		Conf.
2012	[14]	Zribi, H., Mellouli, R., Kacem, I., 2012, Scheduling with release dates on a single machine to minimize total weighted completion time, 5th research days "recherche opérationnelle et aide à la decision" ROAD-2012, Djerba Tunisia, October 10-11.		Conf.

2012	[13]	Baazaoui, M., Mellouli, R., Chabchoub, H., 2012, A new heuristic for the integrated problem of cutting and sizing of 3D-bins, 9th International Conference on Computational Management Science, London England, April 18-20.		Conf.
2012	[12]	Chbichib, A., Mellouli, R., Chabchoub, H., 2012; Comparing iterated local search procedures to solve the profitable vehicle routing problem with multiple trips, the 25th Conference of European Chapter on Combinatorial Optimization, Antalya Turkey, April 26 – 28.		Conf.
2011	[11]	Chbichib, A., Mellouli, R., Chabchoub, H., 2011, Profitable vehicle routing problem with multiple trips: Modeling and constructive heuristics, IEEE proceedings, 4th International Conference on Logistics, LOGISTIQUA'2011, 500-507, ISSN: 2162-9021, DOI: 10.1109/LOGISTIQUA.2011.5939450, SCOPUS, (SJR H-index 7), Publisher : IEEE	Scopus WOS SJR	IEEE proc. conf.
2011	[10]	Chaabane, N., Mellouli, R., Masmoudi, F., Chu, C., 2011, S-stage Flexible Flow Shop scheduling with availability constraints, International Conference on Operations Research and Financial Engineering, Paris, June 24-26.		Conf.
2011	[9]	Mellouli, R., Sadfi, C., Chu, C., 2011, Modeling the parallel-machine scheduling under availability constraints, International Conference on Operations Research and Financial Engineering, Paris France, June 24-26.		Conf.
2010	[8]	Mellouli, R., Sadfi, C., Chu, C., 2010, MILP methods for parallel-machine scheduling under availability constraints, 9th Multi-Objective Programming and Goal Programming - MOPGP10, Sousse Tunisia, May 24-26.		Conf.
2009	[7]	Mellouli, R., Sadfi, C., Chu, C., Kacem, I., 2009, Identical parallel-machine scheduling under availability constraints to minimize the sum of completion times, European Journal of Operational Research, 197 (3) 1150-1165, ISSN: 0377-2217, DOI: https://doi.org/10.1016/j.ejor.2008.03.043, SCOPUS, (SJR 2.37 H-index 288, Q1), ISI WOS (IF=6,4), Publisher: ELSEVIER	Scopus WOS SJR (Q1) JCR	Journal
2007	[6]	Mellouli, R., Sadfi, C., Chu, C., 2007, A Lagrangian relaxation-based lower bound for the Pm,hj1||Sum WiCi scheduling problem, Workshop international Logistique et Transport 2007 – LT' 2007, Sousse Tunisia, Nov 18-20.		Conf.
2006	[5]	Mellouli, R., Sadfi, C., Chu, C., Kacem, I., 2006, Branch-and-bound method to solve the Pm,hj1||sumCi problem, IEEE Proceedings, International Conference on Service Systems and Service Management - ICSSSM'06 , (2) 1257-1263, ISSN: 2161-1890, DOI: 10.1109/ICSSSM.2006.320689, SCOPUS, (SJR H-index 1), Publisher : IEEE	Scopus WOS SJR	IEEE proc. conf.
2006	[4]	Mellouli, R., Sadfi, C., Chu, C., Kacem, I., 2006, MSPT2 heuristic and dynamic programming method for the parallel machine scheduling problem with scheduled preventive maintenance, IEEE Proceedings, International Conference on Service Systems and Service Management - ICSSSM'06, (2) 1264-1270, ISSN: 2161-1890, DOI: 10.1109/ICSSSM.2006.320690, SCOPUS, (SJR H-index 1), Publisher: IEEE	Scopus WOS SJR	IEEE proc. conf.
2006	[3]	Mellouli, R., Sadfi, C., Chu, C., Kacem, I., 2006, A column generation method for the parallel-machine scheduling problem with availability constraint, IEEE proceeding, IMACS Multiconference on Computational Engineering in Systems Applications-CESA, ISBN: 7-302-13922-9, DOI: 10.1109/CESA.2006.4281798, Scholar Google, (SJR H-index 12) Publisher: IEEE	SJR WOS	IEEE proc. conf.
2006	[2]	Mellouli, R., Sadfi, C., Chu, C., Kacem, I., 2006, Tree search-based heuristic and genetic algorithm method for the Pm,hj1||sum Ci scheduling problem, 1st International workshop of the group META - META'06, Hammamet,		Conf.

Tunisia, November 2-4.

2006 [1] Mellouli, R., Sadfi, C., Kacem, I., Chu, C., 2006, Scheduling on parallel machines with availability constraints, Sixth International Francophone Conference of Modeling and Simulation - MOSIM'06, ISBN: 2743008938 9782743008932 (Conference proceedings - Book), Worldcat OCLC: 470194864, Publisher: PARIS LAVOISIER CORP. Conf.

Supervision of Research Projects

Supervision and Co-supervision of Research Master students

[S24] KARIM ALOULOU, Research Master in Operations Management and Logistics (GOL), FSEG Sfax, supervision period: since February 2025 (in progress)

Main supervisor: **Racem Mellouli** Co-supervisor: Jalel El-Euchi
Theme: Logistics (Vehicle Routing Problem).
Subject: «Cooperative Ridesharing Transportation-oriented DARP for travelling maintenance, home healthcare and city crowd dis-congestion».

[S23] FATMA BOUZID, Research Master in Operations Management and Logistics (GOL), FSEG Sfax, supervision period: since February 2025 (in progress)

Main supervisor: Med Ali Elleuch Co-supervisor: **Racem Mellouli**
Theme: Logistics & Production (Vehicle Routing Problem, scheduling).
Subject: « Traveling Maintenance as VRP and Parallel Machine Scheduling with ready, release and setup times and dependency constraints».

[S22] RADHWAN GUESMI, Research Master in Operations Management and Logistics (GOL), FSEG Sfax, supervision period: since January 2024 (defended on July 2024)

Main supervisor: **Racem Mellouli** Co-supervisor: Med Ali Khemakhem
Theme: Logistics (Vehicle Routing Problem).
Subject: « New variants of the H-CVRPTW with vehicle selection, complex tariff-based transportation cost and sequence-dependent variable service times: A study case».

[S21] NAWRESS ZARROUKI, Research Master in Operations Management and Logistics (GOL), FSEG Sfax, supervision period: since February 2022 (defended on December 2023)

Main supervisor: Abdelkarim Elloumi Co-supervisor: **Racem Mellouli**
Theme: Production (Scheduling).
Subject: « Flexible Flow Shop scheduling with availability constraints».

[S20] RAJEH BEL-FAIEZ, Research Master in Operations Management and Logistics (GOL), FSEG Sfax, supervision period: since February 2023 (defended on December 2023)

Main supervisor: **Racem Mellouli**
Theme: Logistics (costing and vehicle routing).
Subject: « New extended real-world variants of the Split Delivery Vehicle Routing Problem with real tariffs-based Extended Urban Transportation Cost model».

[S19] WAHA NOOMÈNE, Research Master in Quantitative Analysis of Economical and Financial Policies (AQPEF), FSEG Sfax, supervision period: since September 2022 (defended on December 2023)

Main supervisor: **Racem Mellouli**
Theme: Logistics (costing and supply planning).
Subject: « Optimal procurement replanning with shipping consolidation under LTL transportation pooling and real-case truck loading rate-based pricing model ».

[S18] SYRINE ISSAOUI, Research Master's degree in Operations Management and Logistics (GOL) at FSEG Sfax, supervision period: February, 2022-November, 2022

Main supervisor: Abdelkarim Elloumi Co-supervisor: **Racem Mellouli**
Theme: Service Production Operations (Scheduling and Timetabling).
Subject: « New Models for Educational Examination Timetabling ».

[S17] OUMAIMA BEN REBAH, Research Master in Operations Management and Logistics (GOL), FSEG Sfax, supervision period: since June 2021 (defended on December 2021)
Main supervisor: Abdelkarim Elloumi Co-supervisor: **Racem Mellouli**
Theme: Production (Cutting Stock).
Subject: « 2D bin packing problem with right angle polygonal shaped pieces ».

[S16] IBRAHIM AL-ZUBIDI, HADI AL-SAYED…, 5-Year Bachelor's degree in Industrial Engineering, Umm Al-Qura university, College of Engineering at Al-Qunfudhah, supervision period: Oct, 2020-June, 2021
Main supervisor: **Racem Mellouli**
Theme: Production (Scheduling).
Subject: « Modeling a Yogurt FFS Scheduling With Maintenance Planning Related Constraints And Flowtime Related Costs. ».

[S15] MOHAMMAD AL-ZUBIDI, MOHAMMAD AL-NASHIRI…, 5-Year Bachelor's degree in Industrial Engineering, Umm Al-Qura university, College of Engineering at Al-Qunfudhah, supervision period: Oct, 2020-June, 2021
Main supervisor: **Racem Mellouli**
Theme: Production (Scheduling).
Subject: « Scheduling in a yogurt Production Line as Flexible Flow Shop with Setup Times and Production and Inventory Planning Related Constraints ».

[S14] MOHAMMAD AL-ZAHRANI, MOHAMMAD HBELI…, 5-Year Bachelor's degree in Industrial Engineering, Umm Al-Qura university, College of Engineering at Al-Qunfudhah, supervision period: Oct, 2020-June, 2021
Main supervisor: **Racem Mellouli**
Theme: Production (Scheduling).
Subject: « Unrelated parallel-machine scheduling with setup times and ready times constraints ».

[S13] JASSAR AL-SAMADANI, ABDULKAREEM AL-ZUBIDI…, 5-Year Bachelor's degree in Industrial Engineering, Umm Al-Qura university, College of Engineering at Al-Qunfudhah, supervision period: Oct, 2019-June, 2020
Main supervisor: **Racem Mellouli**
Theme: Logistics (Routing).
Subject: « A DARP for Collective Transportation Solutions for Tourists and Local Travelers in Crowded Cities».

[S12] ALI ASSIRI, METAEB AL-GARNI…, 5-Year Bachelor's degree in Industrial Engineering, Umm Al-Qura university, College of Engineering at Al-Qunfudhah, supervision period: Oct, 2018-June, 2019
Main supervisor: **Racem Mellouli**
Theme: Operations (Scheduling and Timetabling)
Subject: « Real-Case University Timetabling: Performance analysis and a perspective for an Examination Scheduling's iterative improving procedure ».

[S11] ABDURRAHMEN AL-OMARI, NAWEF AWADH…, 5-Year Bachelor's degree in Industrial Engineering, Umm Al-Qura university, College of Engineering at Al-Qunfudhah, supervision period: Oct, 2018-June, 2019
Main supervisor: **Racem Mellouli**
Theme: Logistics (Routing).
Subject: « Waste Collection Vehicle Routing Problem: a simple CVRP case and a perspective for a multiple tour/depot/landfill variant ».

[S10] AHMAD AZIB, MOHAMMAD AL-GARNI…, 5-Year Bachelor's degree in Industrial Engineering, Umm Al-Qura university, College of Engineering at Al-Qunfudhah, supervision period: Oct, 2017-June, 2018
Main supervisor: **Racem Mellouli**
Theme: Logistics (Routing).
Subject: « Improving the performance of travelling service givers: the case of STC k-Traveling Repairmen Problem at Al-Qunfudhah city».

[S9] FEDIA SGHAIER, Research Master's degree in Operations Research and Production Management (ROGP) at FSEG Sfax, supervision period: February, 2013 -April, 2014

Main supervisor: **Racem Mellouli**
Theme: Production (Integrated Scheduling and Planning).
Subject: «Modeling an integrated planning and scheduling problem in a flexible flow shop environment: case of Delice-Danône yogurt production line».

[S8] IBTISSEM BOUHOUCH, Research Master's degree in Operations Research and Production Management (ROGP) at FSEG Sfax, supervision period: December, 2013 -April, 2014
Main supervisor: Abdelkarim Elloumi Co-supervisor: **Racem Mellouli**
Theme: Service production, Healthcare Operations (Scheduling).
Subject: «Integrated planning and scheduling of operating rooms: study case of the surgical urology department of CHU Habib Bourguiba».

[S7] AMINA AOUADNI, Research Master's degree in Operations Research and Production Management (ROGP) at FSEG Sfax, supervision period: December, 2013 -April, 2014
Main supervisor: Abdelkarim Elloumi Co-supervisor: **Racem Mellouli**
Theme: Service production, Healthcare Operations (Scheduling).
Subject: « Outpatient scheduling on unrelated parallel healthcare rooms with sequence dependent setup times : a real-case».

[S6] ISTABRAK DAOUD, Research Master's degree in Operations Research and Production Management (ROGP) at FSEG Sfax,: supervision period: February, 2013 – December, 2013
Main supervisor: **Racem Mellouli**
Theme: Logistics (Supply-chain design).
Subject: «Location and allocation with pooling resources: the case of merger of two logistics companies».

[S5] NAWEL KRICHEN, Research Master's degree in Science of Transportation and Logistics (STL) at ISGI Sfax, supervision period: February, 2012 – December, 2013
Main supervisor: **Racem Mellouli**
Theme: Logistics (Vehicle Routing Problems).
Subject: « Contribution to solving a pickup vehicle routing problem: a waste collection real case with multiple dumps and vehicle depots».

[S4] HEJER ZRIBI, Research Master's degree in Computer and Multimedia (I2M) at ISIM Sfax, supervision period: February, 2012 – June, 2013
Main supervisor: **Racem Mellouli** Co- supervisor: Imed Kacem (France)
Theme: Production (Scheduling).
Subject: «Monoprocessor scheduling with different tasks release dates to minimize the total weighted completion time».

[S3] ALI LOUATI, Research Master's degree in Operations Research and Production Management (ROGP) at FSEG Sfax, registration in october 2011: supervision period: February, 2012 – April, 2013
Main supervisor: **Racem Mellouli**
Theme: Logistics (Vehicle Routing Problems).
Subject: «Realistic models for a rich and real-life pickup and delivery vehicle routing problem»

[S2] FATMA MAALLA, Research Master's degree in Operations Research and Production Management (ROGP) at FSEG Sfax, supervision period: February, 2011 – July, 3, 2012
Main supervisor: Habib Chabchoub Co- supervisor: **Racem Mellouli**
Theme: Logistics (Supply-chain design).
Subject: «A new realistic approach for modeling the problems of logistics network design: the case of two-level networks».

[S1] MARIEM BAAZAOUI, Research Master's degree in Operations Research and Production Management (ROGP) at FSEG Sfax, supervision period: February, 2011 – June, 2012
Main supervisor: Habib Chabchoub Co- supervisor: **Racem Mellouli**
Theme: Production (cutting stock).
Subject: "A combined cutting and sizing problem of 3D-bins: a real case"

Accompaniment in the supervision of PhD students

[A1] AFEF JALLEB, PhD in Operations Research and Decision-Aid, FSEG Sfax, registration in January 2019, supervision period: since January 2022 (completed)

Main supervisor: Abdelkarim Elloumi Co-supervisor: Racem Mellouli
Theme: Logistics(Networking and Maintenance).
Subject: « Maintenance Planning for Water Distribution Networks».

[A2] OUMAIMA BEN REBAH, PhD in Operations Research and Decision-Aid, FSEG Sfax, registration in January 2022, supervision period: since January 2022 (completed)

Main supervisor: Abdelkarim Elloumi Co-supervisor: Racem Mellouli
Theme: Production (Cutting Stock and Scheduling).
Subject: «An Integrated Cutting Stock and Scheduling problem».

[A3] AHLEM CHBICHIB, PhD in Quantitative Methods (Operations Research) at FSEG Sfax, co-supervision period: October, 2011 – July,2014 (interrupted, withdrawn after advanced progress)

Main supervisor: Habib Chabchoub Co- supervisor: Racem Mellouli
Theme: Logistics (Vehicle Routing Problems).
Subject: «Profitable VRP with multiple use of vehicles».

[A4] NADIA CHAABANE, PhD in Industrial Engineering (GI) at ENIT Tunis, co-supervision period: October, 2010 – July,2013 (interrupted, withdrawn after advanced progress)

Main supervisor: Faouzi Masmoudi (Sfax), Chengbin Chu (France)
Co- supervisor: Racem Mellouli
Theme: Production (Scheduling).
Subject: « Production serial shop scheduling with availability constraints».

[A5] NOUHA HADJ-TAIEB, PhD in Management Sciences (Logistics) at FSEG Sfax, co-supervision period: September, 2010 – July,2011 (completed)

Main supervisor: Habib Affes (Sfax)
Co- supervisor: Racem Mellouli
Theme: Logistics (Network design and planning).
Subject: « Configuration of logistics networks and flow planning – the effect of resources pooling».

Languages

French: (Fluent): written, read, and spoken (continuously used in teaching in France and Tunisia)
English: (Good): written, read, and spoken (strongly used during my teaching experience in KSA at UQU), continuously used for publications and scientific communications.

Practical Skills

Mathematical modeling (Expert)
Programming with C/C++, Matlab (Expert);
Programming with VBA Excel, python (quite Good)
Programming with CPLEX (using OPL language, and Coupling CPLEX with C++, Matlab, Excel and VBA excel) (Expert)
Other software: Prelude ERP, SPSS, STATA, Autocad, MS Access, Oracle, Blackboard.

Trainings

- Cplex Solver for Optimization.
- Matlab and Simulink for simulation
- ORACLE university software: study plan and course module, student enrollment module
- Blackboard for university e-learning