CURRICULUM VITAE OF PROF. GIOVANNI CELANO
Updated to September 2026

Personal Details:
FULL NAME AND TITLE: Giovanni Celano, PhD
DATE OF BIRTH: October 7th,1973
BORN IN: Catania (Italy)

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WOS RESEARCHER ID C-1052-2013

Languages:
Italian, English (fluent), French (basic).

Higher Education:

2003 PhD degree in Manufacturing Engineering – University of Palermo (Italy)
PhD Thesis Title “Mathematical models for the sequencing of mixed model assembly lines”

1998 M.S. degree in Mechanical Engineering – University of Catania (Italy), graduation with final vote 110/110 “cum laude”.

Appointment:

04/2016 – present. University of Catania (Italy), Department of Civil Engineering and Architecture (following the Department of Industrial Engineering closure): Associate Professor in “Tecnologie e sistemi di lavorazione” (Sector code: 09/IIND-04).

10/2014 – 03/2016. University of Catania (Italy), Department of Industrial Engineering: Associate Professor in “Tecnologie e sistemi di lavorazione” (Sector code 09/B1 – ING-IND/16).

01/2002 – 09/2014. University of Catania (Italy), Department of Industrial Engineering: Assistant Professor in “Tecnologie e sistemi di lavorazione” (Sector code 09/B1 – ING-IND/16).

Current scientific qualification:

Awarding the Italian national scientific qualification ("abilitazione scientifica nazionale") as **full professor** in the Sector 09/IIND-04 “Tecnologie e sistemi di lavorazione” (Technology and Manufacturing Systems) up to 20 July 2029

Previously awarding the national scientific qualification ("abilitazione scientifica nazionale") as **associate professor** in the Sector 09/B1 “Tecnologie e sistemi di lavorazione” (Technology and Manufacturing Systems) and in the Sector 13/D1 “Statistica” (Statistics) up to 10 February 2023

Teaching:

Undergraduate level (Bachelor’s degree):

2026-present:
Tecnologia e Sistemi di Produzione (Manufacturing Technology and Systems – Quality Management) 30 hrs, – B.S. programme in Management Engineering, University of Catania, Italy.

2022-2026:
Tecnologia e Sistemi di Produzione (Manufacturing Technology and Systems – Quality Management) 30 hrs, – B.S. programme in Industrial Engineering, University of Catania, Italy.

2021-present:
Gestione dei Sistemi di Qualità (Quality Management Systems) 90 hrs, – B.S. programme in Civil Engineering and Management, University of Catania, Italy.

2003 -2011 (8 Academic Years):
Tecnologia Meccanica, (Fundamentals of Machining Operations), 90 hrs, – B.S. programme in Mechanical Engineering, Faculty of Engineering - University of Catania, Italy.

2004 - 05:
Gestione della Qualità, (Management of Quality), 60 hrs, – B.S. programme in Management Engineering, Faculty of Engineering - University of Catania, Italy.

Postgraduate level (Master’s Degree):

2017 – present
Quality Engineering, 90 hrs, – M.S. programme in Management Engineering, University of Catania, Italy. Course taught in English language.

2011 – 2016 (5 Academic Years):
Gestione della Qualità, (Management of Quality,) 90 hrs, – M.S. programme in Management Engineering, Faculty of Engineering - University of Catania, Italy.

2011-13 (2 Academic Years):
Tecnologia Meccanica, (Fundamentals of Manufacturing Technologies), 90 hrs, – M.S. programme in Management Engineering, Faculty of Engineering - University of Catania, Italy.

2005 – 2011 (6 Academic Years):

Gestione della Qualità, (Management of Quality), 60 hrs, – M.S. programme in Management Engineering, Faculty of Engineering - University of Catania, Italy.

Courses at Scuola Superiore di Catania:
Academic Year 2013-2014:
Progettazione ed analisi degli esperimenti in ambito ingengeristico (Design and Analysis of Experiments for Engineers), 30 hrs.

Academic Year 2019-2020:
Progettazione degli Esperimenti per il Miglioramento della Qualità in Ambito Produttivo (Design of Experiments (DoE) for Quality Improvement in Manufacturing), 35 hrs.

Teaching evaluations:
Results about the evaluations of the course “Quality Engineering”, Master Degree in Management Engineering (LM31 Ingegneria Gestionale), can be found at the following links:
https://www.unict.it/it/didattica/valutazione-didattica-opinione-studenti

Teaching Activities for International Institutions:

Academic Year 2025-2026
Quality Control Techniques (QCT), 30 hs, Master in Business Administration “Total Quality Management”, Department of Business Administration, University of Piraues, Greece.

Academic Year 2024-2025
Quality Control Techniques (QCT), 30 hs, Master in Business Administration “Total Quality Management”, Department of Business Administration, University of Piraues, Greece.

Academic Year 2023-2024
Quality Control Techniques (QCT), 30 hs, Master in Business Administration “Total Quality Management”, Department of Business Administration, University of Piraues, Greece.

Universidade Estaudal Paulista, Faculdade de Engenharia, Campus de Guaratinguetá, Brazil., Brazil, November 2012, presenting an Invited Seminar (15 hours) on “Computation of the statistical properties of advanced control charts with Markov Chain models”.

Advisorship of students:

Academic Year 2018 – 2019.
Tutorship and assistance to one student attending the School of Excellence of the University of Catania.

Academic Year 2017 – 2018.

Tutorship and assistance to three students attending the School of Excellence of the University of Catania.

Academic Years 2013 – 2017 (4 Academic Years):
Tutorship and assistance to three students attending the School of Excellence of the University of Catania.

Academic Years 2011 - 12:
Tutorship and assistance to two students attending the School of Excellence of the University of Catania.

Tutorship and assistance to newly applicant students at the B.S. programme in Mechanical Engineering (40 hrs, coordination of a group of 30 people)
Tutorship and assistance to students at the second year of the B.S. programme in Mechanical Engineering (20 hrs, coordination of a group of 30 people)

Academic Year 2010 – 13, (2 Academic Years):
Tutorship and assistance to newly applicant students at the B.S. programme in Mechanical Engineering (60 hrs, coordination of a group of 30 people)

Bachelor and Master Degree students advisor:
Advisor of Bachelor and Master Degree theses in the fields of Quality Management and Product / Service Management.

PhD students co-advisor:
Enrico Trovato, thesis title “Il controllo statistico di un processo produttivo: progettazione economica di carte adattative bayesiane” (Performing SPC in a manufacturing process: economic design of Bayesian control charts) supervised by Prof. S.Fichera and defended in 07/2008 at the PhD School of Automatic and Electronic Engineering, University of Catania (Italy).

PostDoc positions co-advisor:
Enrico Trovato, research topic “Control charts for monitoring short production runs” supervised by Prof. Philippe Castagliola, LUNAM Universitè, Universitè de Nantes & IRCCyN UMR CNRS 6597, funded by Ecole de Mines de Nantes (France)
Nantes, France, 04/2009 – 04/2010

Management Activities

10/2024-present:
Departmental Delegate for Quality Assurance Activities

Departmental Coordinator of Erasmus Agreements:
2012 - 2021: Bilateral Agreement with University of Nantes (FNantes01)

Academic Year 2013 - 14: Bilateral Agreement with University of Liege (BLiege01)

Academic Year 2012 - 13: Bilateral Agreement with University of Liege (BLiege01)

Membership to Committees:

2026-present: Member of the Teaching Body of the PhD School of “Electronic, Energy and Industrial Engineering”, University of Catania (Italy)

2012-2026: Member of the Teaching Body of the PhD School of “Systems, Energy, Information and Telecommunications Engineering”, University of Catania (Italy)

2012: Member of the Teaching Body of the PhD School of “Systems Engineering”, University of Catania (Italy)

2007-2011: Member of the Teaching Body of the PhD School of “Manufacturing Engineering”, University of Palermo (Italy)

March 2013: Member of the Evaluation Committee for the final exam of PhD Course in Stasistics, University of Padua (Italy)

2022: Committee member for the doctoral thesis discussion of Mr Theodoros Perdikis, title: “Statistical monitoring of discrete and nonparametric statistics with exact run length properties”, defended Febraury 9, 2022.

2020: Committee member for the doctoral thesis discussion of Mrs F.S. Zaidi, title: “Development of Statistical Monitoring Procedures for Compositional Data”, PhD (Doctorat) Automatique et Informatique Appliquée, Nantes Université, defended October 5, 2020.

2013 – 2016: Member of the PhD committee evaluating the research activities of PhD student A. Amdouni, working on “Statistical Process Control monitoring the coefficient of variation in a short production run”, LUNAM Universitè, Universitè de Nantes & IRCCyN UMR CNRS 6597

2013 – 2016: Member of the PhD committee evaluating the research activities of PhD student D. Rahali, working on “Monitoring of time between events and amplitudes”, LUNAM Universitè, Universitè de Nantes & IRCCyN UMR CNRS 6597

Staff Activities:
2013 – 2016
Member of the Scientific Committee of the Computer Lab serving the Departments of Engineering.

Consultancy for companies:

Collaborations with the following companies producing goods / delivering services on projects aimed at improving quality of delivered products by means of Lean and Six Sigma statistical techniques:

Parmon S.p.A., Belpasso (Catania), Italy, www.parmon.it, production of nappies: Implementation of Statistical Quality Control techniques, Design of Experiments;

Dolfin S.p.A., Giarre (Catania), Italy, www.dolfin.it, food industry:
Implementation of Statistical Quality Control techniques;

Sibeg S.r.l., Catania, Italy, www.sibeg.it, The Coca-Cola Company bottler: Implementation of Statistical Quality Control techniques, Process Capability Analysis, Gauge R&R studies, Design of Experiments;

ST Microelectronics, Catania Plant, Italy, www.st.com, semiconductor products manufacturer: Implementation of Statistical Quality Control techniques, Gauge R&R studies, Design of Experiments, Analysis of Customer Complaints, Lean Six Sigma projects for the reorganization of manufacturing areas;

MdB Advisors, Catania, Statistical process monitoring techniques for maintenance activities.

Research

Main topics:

Author of about 145 papers published on peer reviewed international journals and conference proceedings. The main research interests are focused on:

1) the study and development of advanced statistical process monitoring tools. In particular, the largest part of research activities has been focused on the design of control charts for monitoring:
   - Finite horizon processes, (small production runs, low-volume production);
   - Non-normal observations, (distribution-free control charts);
   - The coefficient of variation and ratio of random variables;
   - Statistical process monitoring of extremes.

2) Development of operational research models for the scheduling of manufacturing processes and assembly lines;

3) Development of polymer 3D printed sensors for biological applications

Funded Research projects:

Coordinator of projects:

Piano Pia.Ce.Ri 2024-26 (Piano di Incentivi per la Ricerca di Ateneo), durata 24 mesi: “ISTRICE. Ottimizzazione di Sistemi di Produzione Complessi in Condizioni di Incertezza”, funded by Università di Catania. Funding: 30280.62 Euro.

2017-18, Title” Advanced Statistical Process Monitoring”, funded by the University of Catania

2016-17, Title” Control charts for monitoring finite horizon processes”, funded by the University of Catania

2017 - MIUR Fondo di finanziamento per le attività base di ricerca (FFABR), Funded by the Italian Ministry of Education, University and Research.

Mobility for Graduated Students, 2008, Title: “Un approccio metaeuristico per la risoluzione del problema del trasporto di persone disabili”, (“A meta-heuristic approach for solving the vehicle routing problem of disabile people”) in collaboration with Prof. O. Peton (Ecole Des Mines de Nantes, France). Funded by University of Catania and developed at the Ecole Des Mines de Nantes, France.

Mobility for Graduated Students, 2008, Title: “Carte di controllo per il monitoraggio della variabilita' di un processo produttivo mediante la distribuzione di Johnson”, (“Johnson distribution transformed control charts monitoring process dispersion”) in collaboration with Prof. P. Castagliola (Institute Universitaire de Technologie de Nantes & IRCCyN, France). Funded by University of Catania and developed at the Institute Universitaire de Technologie de Nantes, France.

PRA 2006, Title: “Progettazione di sistemi di carte di controllo adattative in processi aventi capacità limitata di risorsa umana”, (“Design of systems of control charts in processes with limited human resource”), funded by the University of Catania

PRA 2004-2005, Title: “Carte di controllo avanzate per il monitoraggio della variabilità di processo”, (Advanced control charts monitoring process dispersion”), funded by the University of Catania

PRA 2002-2003, Title: “Sviluppo di strumenti adattativi per il controllo statistico di processo”, (“Development of Adaptive Statistical Process Control tools”), funded by the University of Catania

Participation to research groups in research projects:

“GENerate in Europe a Sustainable Industry for Semiconductor”, (GENESIS), call HORIZON-JU-Chips-2024-2-RIA, proposal n. 101194246-1, 36 months, period 01.05.2025-30.04.2028, 750 hours.

Accordi per l'innovazione, D.M. 31 Dicembre 2021 e DD 18 Marzo 2022 - Prog n. F/310165/01-03/X56 – Project “Sistemi innovativi di fabbricazione flessibile per materiali compositi ecocompatibili totalmente riciclabili - RE-COMP”, 36 months, period 14.12.2023-14.12.2026, 1500 hours

“SAMOTHRACE - SiciliAn MicronanOTecHResearch And Innovation CEnter”, Ecosistema dell’Innovazione (PNRR, Mission 4, Component 2 Investment 1.5, Call n. 3277 del 30.12.2021) Spoke 1 – University of Catania, Work Package 4 Health, “Microfluidic-based devices for the comprehensive management and analysis of liquid biopsies”, WP4.1.15, 36 months, period 01.10.2022-30.09.2025, 375 hours.

Piaceri Project 2020-22 (Piano di Incentivi per la Ricerca di Ateneo), “Materiali multifunzionali per dispositivi micro-optofluidici”, funded by the University of Catania

FIR 2014: BATMAN: – Two stages assessment of portable batteries end of life management.

PRA 2008: “Il miglioramento della qualita’ dei processi mediante l’implementazione di tecniche di operations management”, funded by the University of Catania

PRA 2007: “Il miglioramento della qualita’ dei processi mediante l’implementazione di tecniche di operations management”, funded by the University of Catania

MURST EX 60% 2000-2002: Title: “Modelli integrati per la simulazione e l’ottimizzazione di linee di assemblaggio”, funded by the University of Catania

MURST EX 60% 1998-2000: Title: “Verifica virtuale di part program per torni CNC”, funded by the University of Catania

Participation to research groups in national research projects:

PRIN 2005: Title: “Metodologie e strumenti per la configurazione di sistemi produttivi a flessibilità focalizzata”, funded by the MIUR

PRIN 2001: Title: “Pianificazione distribuita del processo e della produzione in ambiente manifatturiero”, funded by the MIUR

Participation to research groups in international research projects:

PICS project, 2006-2008, title: “Methodes Statistiques Adaptatives Pour La Surveillance Della Variabilite’ De Procedes”, funded by the French CNRS.

International Collaborations in Research (present/past):

- Prof. P. Castagliola, LUNAM, Institute Universitaire de Technologie de Nantes & IRCCyN, France;
- Prof. S. Chakraborti Department of Information Systems, Statistics and Management Science, University of Alabama, USA;
- Prof. A.F.B. Costa, Department of Production, FEG-UNESP, Guaratingueta , Brazil;
- Prof. M.S. De Magalhães, Instituto Politecnico (IPRJ), Universidade do Estado do Rio de Janeiro, Brazil;
- Dr. A. Faraz, Centre for Quantitative Methods and Operations Management, HEC Management School, University of Liège, Liège, Belgium;
- Prof. M.B.C. Khoo, School of Mathematical Sciences, University of Sains Malaysia, Penang, Malaysia;
- Dr. M. Machado, Department of Production, FEG-UNESP, Guaratingueta , Brazil;
- Prof. P. Maravelakis, University of Piraeus, Department of Business Administration, Greece;
- Dr G. Nenes, Department of Mechanical Engineering, University of Western Macedonia, Greece;
- Prof. S. Psarakis, Department of Statistics, Athens University of Economics, Greece;

- Dr. S. Panagiotidou, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece;
- Prof. A. Rakitzis, University of Aegean, Department of Mathematics, Karlovasi, Greece;
- Prof. E. Saniga, Department of Business Administration, University of Delaware, Newark, USA.
- Prof. H. Taleb, Higher Institute of Business Administration of Gafsa, University of Gafsa, Gafsa, Tunisia;
- Prof. K.P. Tran, Ecole Nationale Superieure des Arts et Industries Textiles (ENSAIT), Université de Lille, Roubaix, France;
- Prof. V.Tercero, Technologico de Monterrey, Monterrey, Mexico.

Visiting professor at:

- the Institut Universitaire de Technologie de Nantes, Université de Nantes, France, November 2006, June 2007, June 2008, November 2008, October 2009, Febraury 2010, October 2010, March 2011, November 2011, April 2013, November 2013, November 2014, Febraury 2018, November 2018.

- Aristotle University of Thessaloniki, Greece, September 2011.

- Universidade Estaudal Paulista, Faculdade de Engenharia, Campus de Guaratinguetá, Brazil., Brazil, November 2012, presenting an Invited Seminar (15 hours) on "Computation of the statistical properties of advanced control charts with Markov Chain models".

Membership to Research Societies:
European Network of Business and Industry Statistics (ENBIS)
Associazione Italiana di Tecnologie Manifatturiere (AITeM)

Serving for International Journals
2019 – Member of the Editorial Advisory Board of *Engineering Reports*, Wiley, (forthcoming open access journal), https://onlinelibrary.wiley.com/journal/25778196

2010 – present: Associate Editor of *Quality Technology and Quantitative Management*, Taylor and Francis, https://www.tandfonline.com/loi/ttqm20 .

2012 - 2017: Member of the Editorial Board of *Journal of Industrial Engineering*, Hindawi Publishing Company, ISSN: 2314-4890

Reviewing activity for, among the others:
Communications in Statistics – Theory and Methods
Computers & Industrial Engineering
European Journal of Operational Research
European Journal of Industrial Engineering
International Journal of Advanced Manufacturing Technology
International Journal of Healthcare Quality Assurance
International Journal of Logistics
International Journal of Production Economics
International Journal of Production Research

International Journal of Quality and Reliability Management
Journal of Applied Statistics
Journal of Quality Technology
Mathematical and Computer Modelling
Pakistan Journal of Statistics
Quality Technology and Quantitative Management
Scientia Iranica

International Activities and Conference Participation:

Conference co-organizer:

International Symposium on Statistical Process Control organizing committee, Nantes (France), July 16-17, 2009.

Member of Conference Scientific Committees:

International Symposium on Statistical Process Monitoring, Naples (Italy), July 7-11, 2025.

International Symposium on Statistical Process Monitoring, Valencia (Spain), July 3-7, 2023.

ISSAT International Conference on Data Science in Business, Finance and Industry, Da Nang (Vietnam), July, 3-5, 2019

ISSAT International Conference on Data Science in Business, Finance and Industry, Da Nang (Vietnam), July, 1-3, 2020

Invited speaker at ISBIS (International Symposium on Business and Industrial Statistics) Prague (Czech Republic), July 1-4, 2008.

Speaker presenting research papers at the following Conferences:

1. 2nd World Manufacturing Congress, Durham (United Kingdom), September 27-30, 1999;

2. 4th A.I.Te.M. Conference, Brescia (Italy), September 13-15, 1999;
3. XX Convegno Nazionale della Associazione Italiana Cultura Qualità, Bologna (Italy), May 15-17, 2000;

4. 2nd CIRP International Seminar on Intelligence Computation in Manufacturing Engineering, Capri (Italy), June 21-23, 2000;

5. Conferenza Annuale dell'Italian Society for Computer Simulation, Lecce (Italy), December 15, 2000;

6. International CIRP Design Seminar, Stockholm (Sweden), June 6-8, 2001;

7. Progress in Innovative Manufacturing Engineering (PRIME) International Conference, Sestri Levante (GE), (Italy), June 20-22, 2001;

8. 5th A.I.Te.M. Conference, Bari (Italy), September 18-20, 2001;

9. 3rd CIRP International Seminar on Intelligence Computation in Manufacturing Engineering, Ischia (Italy), July 3-5, 2002;

10. 6th ESAFORM Conference on Material Forming, Salerno, (Italy), April 28-30, 2003;

11. 5th Intern. Confer. On Quality, Reliability and Maintainance (QRM 2004), Oxford (UK), April 1-2, 2004;

12. International Conference on Industrial Engineering and Systems Management (IESM 2005), 16-19 May 16-19, 2005, Marrakech, (Morocco);

13. 7th A.I.Te.M. Conference, 7-9 September 7-9, 2005 Lecce (Italy);

14. The 33rd International Conference on Operational Research Applied to Health Services, July 15-20, 2007, St Etienne (France);

15. 8th A.I.Te.M. Conference, September 10-12, 2007, Montecatini Terme (Italy).

16. 2nd DOE User Meeting, March 10-12, 2008, Berlin, (Germany).

17. International Symposium on Business and Industrial Statistics (ISBIS 2008), July 1-4, 2008, Prague, (Czech Republic).

18. International Symposium on Statistical Process Control, Nantes (France), July 16-17, 2009.

19. Congrès International Pluridisciplinaire en Qualité et Sureté de Fonctionnement, Qualita 2011, Angers (France), March, 22-25.

20. 3rd International Symposium on Statistical Process Control, July 9-11, 2013, Athens, Greece.

21. 4th International Symposium on Statistical Process Control, July 7-9, 2015, Padua, Italy.
22. 6th International Symposium on Statistical Process Monitoring, Tunisi, (Tunisia), July 8-12, 2019.

23. 19th Annual Conference of the European Network of Business and Industrial Statistics, Budapest, (Hungary), Sept. 2-4, 2019

24. European Control Conference 2026, Reykjavik, (Iceland), July 7-10, 2026