



PhD Day 2026

Friday, 25 September 2026, 11:00 a.m., Aula Magna Sant'Agostino

Distinguished Authorities, dear Colleagues, distinguished Guests,

Dear PhD Graduates,

Today we celebrate one of the most important moments in the life of a University: the conferral of the PhD, the highest academic degree awarded by a University.

This morning we welcomed the new PhD candidates of the 42nd cycle; this afternoon we will devote a session to those who, in earlier cycles, are now fully engaged in their research. This evening, at Kilometro Rosso, as part of the “European Researchers’ Night”, we will involve our researchers and postdocs who have chosen to begin or continue their research careers at our University.

You cannot imagine how much I envy you for the ceremony we are sharing today, for two reasons:

- First, because exactly thirty years have passed since I decided – partly, I would say, by chance – to embark on my doctoral training. It was another century and, given the extraordinary pace of technological change, one might almost say another millennium. My research led me to study and explore what was then a frontier topic: the adoption of intelligent autonomous agents in industry, more specifically to solve complex production-scheduling problems.



- Second, because, apart from a handshake from the professors on my examination Committee on a hot July day, I did not have the opportunity to celebrate such an important moment with my family and colleagues, as you are able to do today.

That is also because, let us admit it, only in recent years has the PhD begun to receive greater recognition. It has become an essential qualification for an academic career – in my time, believe it or not, it was not – and, finally, it is also beginning to be appreciated in a range of professional and corporate settings, although there is certainly still a long way to go.

So today is a moment of celebration and happiness.

Can earning a PhD be regarded as a kind of talisman for happiness? I sincerely hope so for your professional future, whether you decide to remain in academia or instead spread your wings and embark on new professional adventures.

In my summer reading – the only time of the year when I can read a book calmly and continuously – I came across an essay by two Swedish researchers, Torkel Klingberg and Åsa Wikforss, who ask a seemingly unsettling question: “Why learn if machines already know everything?”

It is a very short essay, and I warmly recommend that you read it.

Drawing on research in positive psychology – a branch of psychology concerned with how to live well in a condition described as “flourishing” – the authors argue that knowledge makes us happier. This happiness does not necessarily stem from professional satisfaction or a higher income – although, of course, that can hardly be



considered irrelevant – but from the immersive psychological state of “flow” that can arise during intellectual activity.

To make this more concrete: have you never found yourselves, while writing your thesis, completely absorbed in the act of writing? The words begin to flow; you lose your sense of time, almost as if in a trance, until something that had seemed impossible to resolve – a problem to solve, an algorithm to write, a text to translate philologically – suddenly takes on a form, a coherence, a direction?

Of course, you may say, Artificial Intelligence can do some of this for us as well. But it cannot give us the experience of flow, the so-called “eureka moment”: that instant when a sudden insight makes us happy and satisfies our curiosity.

This is what Aristotle called “eudaimonia”: happiness understood not as a simple emotion or a passing mood, but as a sustained activity of the soul. For Aristotle, the happiest human being is the one who is able to use reason fully to understand humanity and the world.

And this brings me naturally to our guest of honour today, Professor Maria Chiara Carrozza, a colleague and friend whom I thank for accepting our invitation. In her recent book *“Quanto vale la conoscenza”* – How Much Is Knowledge Worth? – she asks a different but deeply connected question: what value do we assign to knowledge today, in a society in which it is increasingly abundant, accessible and, at least apparently, producible by machines?

We are accustomed to regarding knowledge as a value in itself.



Today, however, that question takes on a new meaning, because a growing share of information is immediately accessible and can even be processed and generated by machines.

The question therefore becomes even more fundamental: what does it mean to produce knowledge today? And, in this context, what should be the role of the University and, in particular, of doctoral education?

In Maria Chiara Carrozza's book, I found a number of reflections that resonate strongly with the meaning we want to give to doctoral education at our University.

Professor Carrozza describes the PhD as a "powerful, transformative and innovative instrument", capable of shaping the development of society and Europe's competitive capacity.

I find this formulation particularly effective, because we would diminish the meaning of the PhD if we regarded it simply as the most advanced level of education or as the first step in an academic career.

A PhD is certainly training in research. But it must be something more. It is the place where a person learns to engage with what we do not yet know: to enter a territory where, by definition, no answer is already available; to formulate an original question, build a method for addressing it, accept uncertainty, recognise errors and revise one's hypotheses.

Let me quote a beautiful passage from the introduction to Professor Carrozza's book: "For me, in the end, research is fellowship, an act of love towards humanity and the universe. Like art and music, science expresses the essence of the human being, and in its very practice it asks questions that reveal the wonder of our abilities."



It is a definition that reminds us that research is not only about producing results, but is also a profoundly human way of relating to what we do not yet know.

For this reason, I regard our PhD candidates not simply as people we are training, but as an essential part of the University's scientific community.

And for this reason, over recent years we have sought to strengthen doctoral education at UniBg, quantitatively but above all qualitatively: by opening it more fully to the international dimension, to engagement with companies and institutions, and to interaction across disciplines.

The ecological transition, artificial intelligence, the transformation of work, health, inequalities, new forms of mobility, and the sustainability of our production systems and cities are technological and economic challenges, but at the same time social, legal, cultural and ethical ones.

The PhD of the future must therefore preserve strong disciplinary depth while, at the same time, developing an equally strong capacity to cross boundaries.

But crossing boundaries also means rethinking the relationship between research and education. In her book, Maria Chiara Carrozza recalls the Humboldtian idea of the university, in which research and education are not separate functions, but mutually reinforcing ones.

I believe this idea is more relevant today than ever. In a world in which access to information is almost immediate, the value of the University cannot lie merely in transmitting what we already know. Increasingly, it must lie in teaching how to act when faced with what we do not yet know.



And this is precisely what research teaches us: to formulate questions, construct hypotheses, seek evidence, confront unexpected results, recognise an error, and exercise the intellectual freedom to change our minds.

There is another significant point in her book that I would like to recall. It is what the report *"Much More Than a Market"*, presented by Enrico Letta to the European Parliament in April 2024, defined as Europe's "fifth freedom": alongside the free movement of people, goods, services and capital, we must also ensure the free movement of knowledge, research, innovation, data and skills.

You, as PhD candidates and graduates, are perhaps among the most tangible expressions of this fifth freedom. You move across disciplines, universities, countries, laboratories, companies and institutions. You carry knowledge with you and acquire new knowledge along the way. You build scientific relationships that often outlast individual projects and institutional affiliations.

This is also the vision we are seeking to build at UniBg: a Doctoral School that is increasingly international, open and interconnected, and fully embedded in the European knowledge area.

This vision, of course, did not begin today. It is the result of a path built over the years by many people.

In this regard, allow me to express my heartfelt thanks to Professor Elvio Cossali, who has led the School of Advanced Doctoral Education for the past six years. I have had a long personal academic relationship with him, dating back to my arrival in Bergamo, at the Dalmine Engineering Campus, in 2001. Professor Cossali was one of the first Engineering faculty members at our University to contribute to the development and



growth of our Faculty, and later gave a major impetus to research across the entire University, first as Vice-Rector for Scientific Research from 2009 to 2015 and subsequently as Director of the Doctoral School.

My thanks go to him for sharing, over the five years of my term of office and together with the Vice-Rector for Scientific Research, Professor Mariafrancesca Sicilia, a genuine strategic plan to strengthen the Doctoral School. We have grown from 6 to 13 PhD programmes, progressively reinforcing their interdisciplinary and international character. Among them, I am thinking in particular of the PhD Programmes in *Landscape Studies for Global and Local Challenges*, *Artificial Intelligence for Sustainable Futures*, and *Health and Longevity* - the latter in collaboration with the Mario Negri Institute - and the PhD Programme *MEET (Manufacturing Ecosystems Enabled by Intelligent Technologies)*, designed and delivered in collaboration with the local economic and industrial ecosystem to train researchers capable of addressing the complexity of production systems and contributing to the digital and sustainable transformation of industry.

At the same time, the School has been thoroughly reorganised in order to respond more closely to the needs of our PhD candidates.

My heartfelt thanks also go to the colleagues serving on the School's Executive Board, to the Coordinators of our PhD programmes, and to all colleagues serving on the doctoral programme boards. Thanks to you, our University can offer doctoral programmes of excellence within both the national and international landscape.

I am also grateful to all the technical and administrative staff of the Doctoral Programmes Office – namely Valerio Corna, Anna Cattaneo, Sara Maninetti, Marcello



Novissimo e Claudia Radaelli - for their tireless and invaluable work in supporting teaching and organisational activities.

I would also like to express my sincere thanks to all the organisations - companies, third-sector organisations and public administrations - that have believed in our doctoral programmes by funding scholarships or hosting our PhD candidates.

Last but not least, dear PhD graduates, let me extend a warm greeting to your loved ones who are here today and whose support has helped you complete this important step in your lives.

My warmest congratulations on the achievement we celebrate today.

And one final wish: preserve the curiosity that has brought you this far, because the most important outcome of a PhD is not simply to have found some answers, but to have learned to formulate those research questions that, before embarking on this journey, we were not yet able to see.

My very best wishes for your future, and I wish you all a wonderful celebration of research!