



This magazine features contributions from students pursuing the Journalism course at MCAST's Institute for the Creative Arts, under the guidance of their lecturer, Ms. Nikita Pisani

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# MCASTLINK ISSUE 71

Education must extend beyond traditional classrooms, offering students hands-on experiences that equip them with the skills needed to face real-world challenges. Work-based learning and apprenticeships play an important role in this transformation, bridging the gap between theory and practice while enhancing students' employability.

This 71th edition of our magazine highlights the impact of work-based learning on students, lecturing staff and employers. Through insightful interviews, inspiring student experiences, and perspectives from industry leaders, we explore how these opportunities create a strong foundation for future careers. Employers share firsthand accounts of the value apprentices bring to the workplace, while students reflect on how practical experience has shaped their professional paths.

To gain deeper insights into industry perspectives, journalist Ms. Coryse Borg speaks with several employers who collaborate closely with MCAST. In addition to these discussions, she conducts two in-depth interviews, offering a closer look at how organisations benefit from apprenticeships and work-based learning.

A key event in this edition is the MCAST Onboarding Event, which once again brought students and industry partners together, providing a platform to explore apprenticeship opportunities and prepare for the transition into the workforce. More details on this event can be found inside the magazine.

Beyond student apprenticeships, the magazine also highlights the experiences of MCAST lecturers who transitioned from industry to lecturing. Two articles written by MCAST staff explore how these lecturers' professional backgrounds enrich vocational education, ensuring students receive industry-relevant training and mentorship.

The voices of students themselves are equally central to this edition. MCAST Journalism students have contributed interesting articles on their peers' experiences with work-based learning, shedding light on how placements have influenced both their career development and personal growth.

Another insightful feature comes from Ms. Antonella Brincat, Senior Lecturer at MCAST, who examines work placements in social care management. Her article brings together reflections from both nine alumni, providing a comprehensive view of the learning experiences within this critical sector.

We hope this magazine serves as both an inspiration and a call to action—for students to embrace the opportunities work-based learning provides, for employers to continue investing in apprenticeships, and for educators to nurture the next generation of skilled professionals. Together, we can shape a future where education and industry collaborate to build a stronger, more dynamic workforce.

# **EDITORIAL**



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# PRINCIPAL AND CEO MESSAGE BRIDGING EDUCATION AND INDUSTRY: THE TRANSFORMATIVE POWER OF WORK-BASED LEARNING

In today's rapidly evolving job market, theoretical knowledge alone is insufficient. Employers increasingly seek professionals who combine academic expertise with practical skills. Workbased learning (WBL) and applied learning approaches have become integral to modern education, particularly vocational institutions like MCAST. These methodologies create a seamless transition between education and industry, ensuring that graduates enter the workforce with hands-on experience, fully prepared to contribute from day one.

WBL integrates real-world work experiences into academic curricula, allowing students to apply their knowledge in professional settings. Through apprenticeships, internships, and industry placements, students gain direct exposure to workplace expectations, industry challenges, and professional environments. This experiential learning fosters adaptability, problem-solving abilities, and confidence—essential qualities in today's highly competitive job market.

MCAST is pivotal in establishing industry partnerships to provide meaningful WBL opportunities. By collaborating with private businesses, government agencies, and non-profit organisations, the college ensures its curriculum remains relevant and aligned with workforce demands.

These partnerships enhance students' technical skills and offer mentorship, networking opportunities, and potential employment pathways.

The rise of artificial intelligence (AI) is transforming industries, automating processes, and enhancing efficiency across various sectors. While AI excels at data processing, task automation, and complex decision-making, it lacks fundamental human attributes such as emotional intelligence, creativity, critical thinking, and interpersonal communication. This is where WBL proves invaluable—it equips students with the soft skills that AI cannot replicate.

By engaging in real-world experiences, teamwork, and industry-driven projects, students develop the agility and problem-solving skills required to complement Al-driven advancements rather than be displaced by them. In an Alpowered world, collaborating, innovating, and thinking critically remains crucial, making WBL an essential pillar of education and future employment.

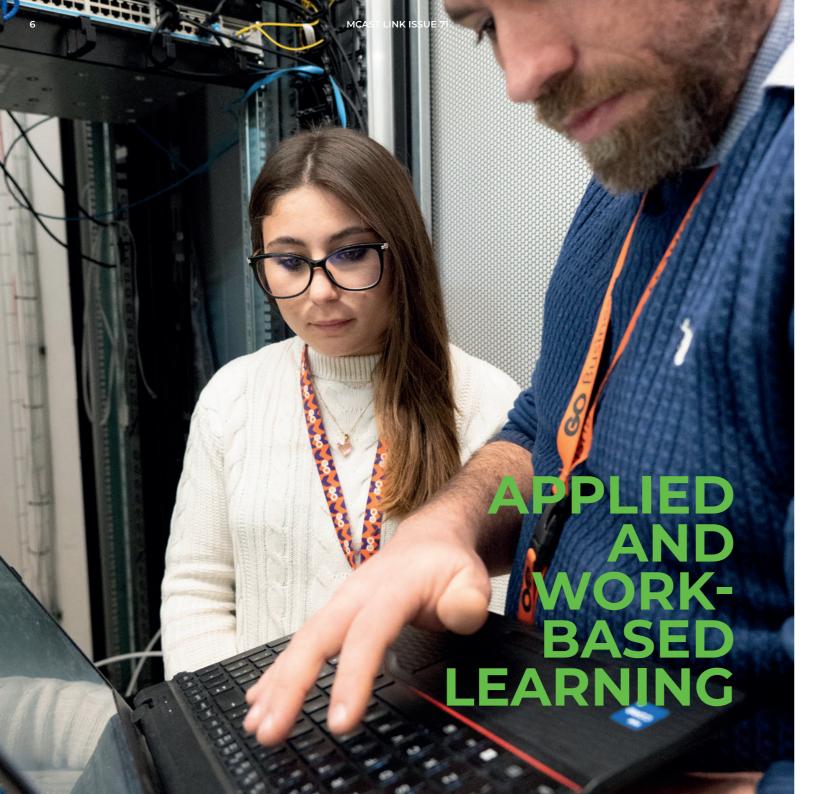
WBL opportunities significantly enhance employability, providing students a competitive edge in securing stable and fulfilling careers. These programmes encourage students to tackle real-world challenges, develop innovative solutions, and refine technical expertise through project-based learning, simulations, and collaborative industry initiatives.

Moreover, applied learning benefits not just students but also employers. Companies gain access to a pool of highly skilled and motivated individuals who understand industry-specific requirements. Businesses that participate in apprenticeship programmes often retain students as full-time employees, reducing recruitment costs and ensuring a smooth transition into the workforce.

At the recent MCAST Meets Industry Encounter conference, organised in collaboration with the National Skills Council, discussions focused on the significance of National Occupational Standards (NOS) and Skills Cards in fostering a competent and future-ready workforce. Such initiatives ensure learners' skills are formally recognised, benefiting individuals, industry, and the broader economy.

As education continues to evolve, integrating WBL into academic programmes is no longer a choice but a necessity. Policymakers, educators, and industry leaders must collaborate to expand these opportunities, ensuring students acquire the practical skills needed to thrive in their careers.

By embracing work-based learning, we are not just educating students but shaping a skilled, resilient, and future-ready workforce prepared to lead in an ever-changing world.



# THE VALUE OF WORK-BASED LEARNING - AS TOLD BY THE EMPLOYERS BY CORYSE BORG, CONTENT WRITER

MCAST's work-based learning initiatives are proving to be a win-win for both students and employers. As more businesses recognise the advantages of integrating interns into their workforce, Malta's job market will continue to benefit from a steady influx of skilled, jobready professionals.

The commitment to nurturing young talent on the part of local companies and institutions exemplifies the potential of programmes such as these, demonstrating that investment in future employees can lead to longterm success for all parties involved.



DR REBECCA GATT, HUMAN RESOURCES DIRECTOR AT THE ARCHDIOCESE OF MALTA

"Our experience with MCAST apprenticeships has been very positive," Dr Gatt says. "The environment at the Archbishop's Curia is unique and we encourage the students to apply their knowledge in a professional yet mission-driven setting. Students bring fresh perspectives and, in our experience, are willing to learn. We appreciate their adaptability, creativity, and skills, which complement our work, whether in administration, media, digital services, or technological support."

Dr Gatt emphasises the significance of work-based learning in bridging the gap between academic theory and practical application. While MCAST programmes

equip students with technical knowledge, she believes apprenticeships provide an essential space for the development of professional behaviour, teamwork, and problem-solving skills.

"For students, the experience allows them to build confidence and gain exposure to the realities of a professional setting. For us as an employer, it brings new ideas, and an opportunity to mentor young professionals who may later become valuable team members. It also helps us stay connected with developing trends in education."

When asked about the qualities that make MCAST students stand out, Dr Gatt highlights their technical proficiency, enthusiasm, and adaptability. She notes that the institution's practical approach to learning ensures that students are ready to contribute effectively from the outset of their placements.

#### RODIANNE ABELA, BUSINESS DEVELOPMENT MANAGER AT HYDROLECTRIC

Ms Abela is also a firm believer in the value of work-based learning.

She has played a key role in integrating MCAST students into the company through internships and apprenticeships. Her experience highlights the numerous benefits that such programmes bring to both students and employers.

Hydrolectric has welcomed multiple MCAST students through its internship programmes and, according to Ms Abela, the experience has been overwhelmingly positive.

For Ms Abela, work-based learning is essential in preparing students for the professional world. Reflecting on her own academic journey, she notes that theoretical knowledge alone is not enough.

"It is very important to have experience-based learning. You learn so many skills - not just knowledge-based, but also how to work in a team, how to ask certain questions, even how to send professional emails, manage time, and be punctual," she explains.

From an employer's standpoint, the benefits of work-

based learning extend beyond student development. Ms Abela acknowledges that finding skilled workers in Malta can be challenging. These internships allow companies to train students and potentially retain them as full-time employees.

"The fact that they are young makes it easier to keep them on after their internship. They can grow with us, and that is great. The ones we have right now are doing really well - they have made their tasks their own. I am very impressed!" she states.



MARK GALEA, HEADOFPEOPLE AT LUFTHANSA TECHNIK MALTA

"Our experience hosting MCAST students for apprenticeships at Lufthansa Technik Malta has been a positive one. MCAST students come prepared with a technical foundation and some hands-on skills which are essential in our industry," Galea states.

"MCAST's work-based learning programmes create a solid foundation for students to enter the workforce with confidence, technical competence, and a positive mindset, making them valuable assets to our industry," he explains.

"Students, on the other hand, gain invaluable real-world experience, allowing them to refine their technical abilities while also developing teamwork, communication, and problem-solving skills. This hands-on exposure ensures they are well-prepared to meet industry demands upon graduation," Galea continues.

"In aviation maintenance, practical training is just as important as theoretical knowledge, and work-based learning provides this balance," he adds. "Partnering with MCAST for work-based learning programmes is a win-win situation. Companies gain access to enthusiastic, trained students, while students receive practical experience that prepares them for long-term careers," he asserts. "Additionally, providing constructive feedback to educational institutions such as MCAST helps refine curricula to better align with evolving industry needs."

JOSEPH GAUCI,
PLANNING
AUTHORITY'S
DEPUTY
DIRECTOR
WITHIN THE
ICT MAPPING
AND DIGITAL
SERVICES
DIRECTORATE



According to Mr Gauci, the experience has been overwhelmingly positive, providing both the students and the Authority with valuable opportunities for growth and development.

"We have hosted students from construction management, computer systems and networks, and software development courses. They have contributed a fresh approach to geomatics and surveying disciplines, thus enhancing the overall skill set of the workforce," he says.

"These programmes give students a practical approach to the theoretical concepts they study at College. There is also an element of applying theory to the real world. The experience gained through workplace mentoring helps students grow in both attitude and technical knowledge."

"The employer has a hands-on experience of the potential workforce, whilst the students get a taste of potential opportunities in the employment domain. Students also gain a practical insight into the actual work within the industry for which they are studying and aiming to get certified."

"It is a good opportunity to be able to determine the skill sets available for tomorrow's workforce. An apprenticeship scheme is a trial for both the students and the employer. The scheme gives an opportunity to try and test potential candidates for employment whilst also equipping them with skills required for coping in the working world. Thus, the transition from an academic setting to a workplace is softened."



FRANCES BUGEJA, HEAD OF HUMAN RESOURCES AT THE M. DEMAJO GROUP

According to Ms Bugeja, work-based programmes effectively bridge the gap between theory and practice, equipping students with practical skills and professional insights.

"Those who are open to learning, take initiative, and engage with their mentors, gain valuable industry insights and practical skills that prepare them for the professional world," she notes. "By working alongside experienced professionals, students cultivate a strong work ethic, refine their communication abilities, and learn to navigate workplace dynamics."

Additionally, apprentices bring fresh perspectives and enthusiasm that can positively influence workplace culture.

"The most valuable qualities we have seen in the students are curiosity, adaptability, and a willingness to integrate with the team," Bugeja affirms. "When apprentices embrace learning opportunities and demonstrate initiative, they add value to the workplace."

SHERIF SLEIMAN, BAXTER'SSENIOR HR MANAGER



"It's something I think we lacked when I was studying. The experience, internship or apprenticeship, makes a real difference when going for a job interview," he explains. "The students arrive with potential, and through their time at Baxter, they refine and develop their skills. They come with a degree of knowledge in areas like teamwork and management, which they've learned at school, but they build on it further with us."

According to Mr Sleiman, MCAST's work-based learning programmes provide a strong theoretical foundation, but their success also depends on how actively an employer engages with them.

"Top management needs to be involved and understand more about these programmes," he emphasises. "When businesses take an active role in mentoring and guiding students, they help shape a more competent and confident workforce."

For companies, the benefits of welcoming MCAST students extend beyond providing training. In industries facing talent shortages, interns can help bridge critical gaps.

"The advantage is that they fill the gap of certain resources that are hard to find, such as technicians. It's also a long-term employment strategy for the company," Mr Sleiman points out. "By investing in young talent, businesses can build a pipeline of skilled professionals who are familiar with their operations and company culture."

He also praises MCAST students for their adaptability and technological skills. "They are very tech-savvy, and they are usually fast learners," he says. "These attributes make them valuable additions to the workplace, as

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they quickly integrate into teams and contribute to ongoing projects."

When asked if Baxter would consider offering permanent roles to MCAST students after their internship or apprenticeship, Sleiman is unequivocal in his answer: "Two hundred percent! I've done so in previous years and would be very happy to do it again."

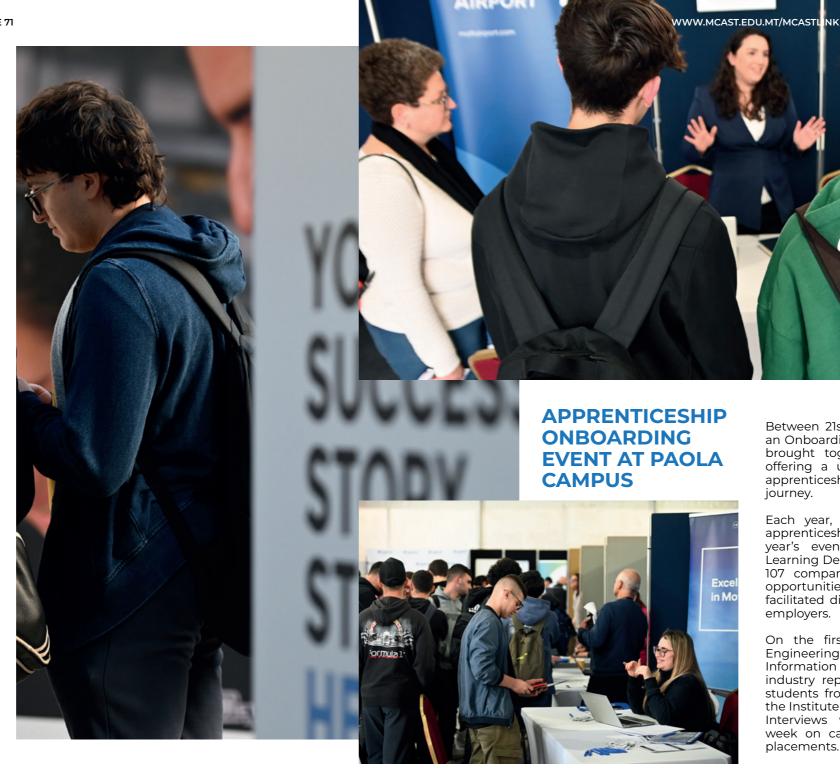


ANDRÉ CAMILLERI, HUMAN RESOURCES ADMINISTRATIVE COORDINATOR AT HERITAGE MALTA

"Our experience has been largely positive, with most students arriving well-prepared and adaptable to our work culture," he explains.

The experience at Heritage Malta offers students the unique opportunity to engage directly in the preservation and promotion of the Maltese Islands' rich cultural heritage. Interns and apprentices become part of this mission, working in a dynamic environment where history, art and culture come to life.

"Work-based learning programmes are an excellent opportunity for businesses to bridge the gap between theoretical knowledge and practical experience for students," Mr Camilleri advises. He encourages companies to embrace these partnerships, recognising the value they bring to both the students and the industry.



Between 21st and 24th January 2025, MCAST hosted an Onboarding Event at the Paola Campus. The event brought together students and industry partners, offering a unique opportunity to explore potential apprenticeships and prepare for their professional journey.

Each year, over 2,300 MCAST students undertake apprenticeships as part of their qualifications. This year's event, organized by MCAST's Work-Based Learning Department, saw the participation of around 107 companies, providing over 847 apprenticeship opportunities across various sectors. The event facilitated direct engagement between students and employers.

On the first day, students from the Institute of Engineering and Transport and the Institute of Information and Communication Technology met with industry representatives. The second day welcomed students from the Institute of Applied Sciences and the Institute of Business Management and Commerce. Interviews were also conducted throughout the week on campus to match students with suitable placements.

Principal and CEO, Mr. Stephen Vella, accompanied by Deputy Principal Ing. Pierre Dalmas and KSM President Matthew Sant, visited the event. Mr. Vella commented:

"We want our students to be aware of the many opportunities available to them. Bringing employers to campus motivates students and creates a supportive environment to help them navigate the recruitment process. It is also a chance for industry partners to discover emerging talent. We want to emphasize that the onboarding event is not just a formality; apprenticeships should be a valuable learning experience."

MCAST has also developed an employer toolkit, offering resources and templates to support participating companies. This initiative ensures that both apprentices and employers are equipped for a successful and rewarding experience.







EMPOWERING THE WORKFORCE OF TOMORROW: EU POLICIES DRIVING WORK-BASED LEARNING



#### BY FRANCESCA ATTARD, DEPUTY DIRECTOR POLICY ANALYSIS

Work-based learning (WBL) has become a cornerstone in bridging the gap between education and employment, equipping individuals with the skills required to thrive in a competitive and ever-evolving labour market. Recognising the pivotal role of WBL in addressing youth unemployment and fostering economic growth, the European Union (EU) has implemented several impactful policies and initiatives to strengthen its presence across Member States. Institutions like MCAST are leading the way in aligning with these policies, translating them into tangible benefits for learners and employers.

# A Unified Approach with the European Framework for Quality and Effective Apprenticeships (EFQEA)

Launched in 2018, the EFQEA serves as a benchmark for apprenticeship quality across Europe. The framework promotes effective learning environments, fair working conditions, and regulatory support, ensuring that both learners and employers benefit equally. This approach has been instrumental in making apprenticeships an attractive option for career development.

At MCAST, these principles are deeply embedded in its apprenticeship programmes. By working closely with local industries, MCAST ensures that its students receive high-quality training, fostering the skills necessary for a seamless transition into the workforce.

# The European Alliance for Apprenticeships: A Collaborative Effort

Since 2013, the European Alliance for Apprenticeships (EAfA) has united governments, businesses, and social partners to expand WBL opportunities. By fostering collaboration and sharing best practices, the alliance has driven national reforms aimed at improving the quality and perception of apprenticeships.

MCAST contributes significantly to these efforts through its well-structured apprenticeship programmes, offering practical experience in sectors such as engineering, health, ICT, and hospitality. These partnerships ensure that students graduate with the expertise and confidence needed to meet industry demands.

#### **Erasmus+: Broadening Horizons**

Erasmus+ extends beyond traditional academic exchanges by integrating WBL opportunities. This initiative supports learners and professionals in gaining international experience, enhancing their skills and employability. It also fosters partnerships among educational and training institutions to bridge the gap between education systems and labour market needs.

MCAST participates actively in Erasmus+, providing students and staff with international exposure. Through mobility programmes and collaborative projects, MCAST builds a skilled workforce while promoting cross-border collaboration.

#### **EfVET: Advocating for Vocational Excellence**

The European Forum of Technical and Vocational Education and Training (EfVET) plays a pivotal role in advocating for WBL. Representing vocational education and training (VET) providers, EfVET fosters collaboration and dialogue between educators, policymakers, and industry leaders to shape sustainable WBL practices.

As a member of EfVET, MCAST gains access to international best practices, participates in EU-funded

projects, and contributes to shaping policy. This collaboration enhances MCAST's WBL programmes, ensuring they are aligned with evolving industry trends.

# **Guiding Principles for Excellence in Work-Based Learning**

The EU has established 20 guiding principles for high-performance apprenticeships and WBL. These principles are grouped into four categories, offering a roadmap for Member States and institutions like MCAST to deliver high-quality WBL programmes:

- 1. National Governance and Social Partners' Involvement
- 2. Support for Companies Offering Apprenticeships
- 3. Attractiveness of Apprenticeships
- 4. Quality Assurance in Work-Based Learning

MCAST implements these principles actively by fostering strong partnerships with local employers, offering career guidance, and ensuring that its programmes meet both industry and educational standards.

#### **Looking Ahead: The Traineeship Directive**

The proposed Traineeship Directive seeks to standardise and enhance the quality of traineeships across the EU. By addressing issues such as fair remuneration, social protection and the misuse of traineeships as substitutes for regular employment, the directive aims to ensure equitable and meaningful opportunities for young people transitioning from education to the workplace.

By aligning its existing practices with the directive's recommendations, MCAST is well-positioned to continue leading in this area, ensuring its traineeship programmes remain a benchmark for excellence and contribute to the development of a skilled and prepared workforce.

# A Financial Backbone: The European Social Fund Plus (ESF+)

The ESF+ supports projects that integrate WBL into education systems, focusing on infrastructure, employer engagement, and social inclusion. MCAST has successfully leveraged ESF+ funding to enhance its facilities, engage employers, and expand WBL opportunities for its students.

#### MCAST: Leading the Way in Work-Based Learning

As Malta's largest vocational education and training institution, MCAST exemplifies how EU policies can be translated into practical outcomes. By aligning its programmes with EU frameworks, participating in EfVET, and leveraging Erasmus+ and ESF+ funding, MCAST provides students with the skills and experiences they need to thrive in a dynamic labour market.

Through these policies and partnerships, the EU and institutions like MCAST ensure that WBL remains a cornerstone of vocational education, driving economic growth and social inclusion across Europe.



# BRIDGING EDUCATION AND INDUSTRY – AN INTERVIEW WITH MS LUCIA VELLA, HR MANAGER AT MITA BY CORYSE BORG, CONTENT WRITER

With over 30 years of experience in human resources, Lucia Vella, HR Manager at MITA, has played a pivotal role in shaping talent management, employee relations and leadership development within the agency. Her dedication to student development has been instrumental in fostering a seamless transition from education to the professional world.

As the digital landscape continues to evolve, the need for skilled ICT professionals has never been greater. Recognising this, MITA has long been committed to offering apprenticeship opportunities to students from MCAST.

These placements not only help students gain invaluable real-world experience but also allow MITA to tap into a pool of motivated, skilled individuals eager to contribute to the agency's objectives.

"MCAST apprentices have supported MITA in many of its corporate objectives. Apprentices have always brought strong enthusiasm to learn and to integrate into our work culture," she says. "Apart from ICT related skills which are well aligned with the agency's requirements, students also bring forward a positive attitude. Students strengthen teamwork through their contribution and new perspectives. Their positive attitude shows in their adoption of our work ethics and in adhering to our policies and to our way of working."

Moreover, Ms Vella asserts, MCAST students apply their problem-solving capabilities on the job and have proven to be valuable contributors to the delivery of the agency's services and projects.

At MITA, students are assigned work that is aligned with their course of studies and a mentor who provides them close direction. With time they will develop the technical competencies required. Their progress depends on their capabilities and eagerness to learn.

"The apprenticeship allows the students to develop the interpersonal and communication skills required in a work environment," Ms Vella states. "They learn to work in a team and communicate with various levels of authority. This holistic approach helps the students mature, establish personal integrity and develop a professional identity, all of which are key characteristics in a professional world."

The benefits of work-based learning extend to both students and employers. For students, the experience provides a clearer understanding of their career aspirations while simultaneously strengthening their CVs with practical experience.

On the other hand, MITA's managers often leverage students' enthusiasm and creativity in brainstorming sessions, recognising their contributions as vital to the Agency's success.

"Our line managers describe the students as valuable resources who contribute to the team and the Agency with the same dedication and passion as full-timers," says Vella. "This allows us to serve more customers and deliver a better service."

#### The Employer's Perspective on Apprenticeships

From an employer's perspective, apprenticeship programmes offer a structured way to assess and cultivate future talent. By the time students complete their placements, MITA has had the opportunity to evaluate their potential as future employees.

Many former apprentices transition into full-time roles within the Agency, already familiar with its work ethics, policies, and expectations. Ms Vella highlights that, "some of our current employees who started as apprentices have developed into managerial or specialised positions and are now key people within our agency."

Encouraging other businesses to embrace work-based learning programmes, Ms Vella emphasises the low-risk, high-reward nature of these initiatives. Companies have the flexibility to assess students' capabilities, and MCAST actively monitors progress, ensuring that any challenges are addressed promptly.

#### **What Makes an Apprentice Stand Out?**

Every year MITA successfully employs several MCAST apprentices who then apply to fill the Agency's vacancies. When it comes to selecting apprentices for full-time positions, MITA looks for individuals who embody professionalism, adaptability, and a strong work ethic.

"Personal integrity and credibility are qualities that stand out in an interview," Ms Vella asserts. "In our experience of MCAST students, those who embarked on their career with our Agency through an apprenticeship were normally able to hit the ground running once employed, developed deeper roots within the Agency and showed stronger engagement resultin in a longer-term relationship."

She continues to say that the students come well equipped with the ICT skills needed to carry out assigned tasks. This shows the direct relation between their studies and practical work. Students are involved in work related to research, networking, development,

testing, coding, troubleshooting, process improvement, client services, amongst others.

MITA line managers describe the students as "valuable resources who contribute to the team and the Agency with the same dedication and passion as that of the full-timers." This allows the Agency to serve more customers and hence deliver a better service.

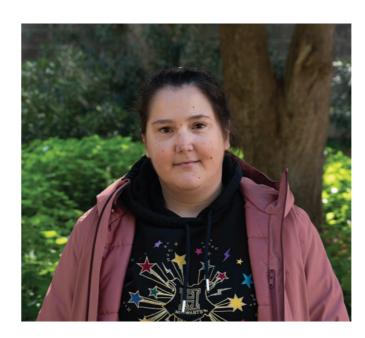
Ms Vella says that she would certainly encourage other companies to take this opportunity.

"The scheme is flexible and allows any issues to get resolved through discussions with MCAST along the way. The MCAST team monitors students by sending their mentors on the job to discuss the students' progress. Besides, apprenticeships may ease the burden of recruitment since by the end of their studies students will develop into potential candidates. This is useful nowadays where it is becoming increasingly difficult to find the right person for the job," she concludes.



LAYING THE FOUNDATION: FRANCESCA CASSAR'S MCAST JOURNEY AND THE APPRENTICESHIP OF EARLY YEARS EDUCATION

# BY SOPHIE AGIUS VADALA, MCAST JOURNALISM STUDENT



Francesca Cassar, a former MCAST student, graduated in 2006 with a BTEC National Diploma in Early Years. She takes pride in being part of the inaugural group of students to complete this programme. Currently, Ms Cassar works as an Early Years teacher in the private sector, where she applies her educational background to nurture young learners.

Reflecting on her time at MCAST, Ms Cassar notes that her cohort was quite small, being one of the first groups to undertake the programme. This intimate setting fostered close bonds among the students, as well as strong relationships with their lecturers. She emphasizes that the lecturers were incredibly supportive and provided valuable assistance throughout the course.

Ms Cassar highlights the significance of the relationship between students and lecturers, stating that it is essential for building trust, engagement and motivation. She explains that such relationships encourage open communication, offer personalized guidance and create a positive learning environment, all of which enhance both academic and personal growth.

Whilst studying, Ms Cassar was fortunate to have had the opportunity to complete both an apprenticeship and an internship. Both these opportunities provided her with the invaluable learning experiences found in the educational school settings.

Through the apprenticeship Ms Cassar gained handson experience by working directly in the classroom, assisting the teachers, and also interacting with the students. Experiencing this practical approach was especially beneficial for Ms Cassar. This was because she learned best through hands-on experience. She goes on to say that the experience allowed her to develop essential skills, understand the dynamics of a classroom, and most importantly helped her build confidence for her future role as an educator. MCAST LINK ISSUE 71

Her internship enriched her learning experience further by offering several opportunities. She was able to observe and participate in various teaching strategies, collaborate with experienced educators, and understand the daily responsibilities of a teacher. Ms Cassar notes that this experience allowed her to apply the educational theories she had studied, bridging the gap between academic knowledge and practical application in the classroom. She stresses that both experiences were invaluable to her. This is because they shaped her approach to teaching and also provided her with a strong foundation, practical skills and a deeper understanding of the effectiveness of classroom practices.

In summary, Ms Cassar's story highlights the importance of apprenticeships and internships for students. As she explains, these opportunities allow students to gain hands-on experience in their future workplaces, laying the groundwork for their professional success.



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# BY DR MELANIE DARMANIN, INSTITUTE OF COMMUNITY SERVICES

MCAST is committed to forming a crucial link between theoretical knowledge and applied learning, highlighted through work-based experiences. This philosophy is particularly evident in the Early Years programmes offered by the Institute of Community Services, where prospective educators engage in teaching placements, allowing them to apply their learning in educational contexts. A prime example showcasing this approach is the story-writing project undertaken by second-year students pursuing a Bachelor of Arts (Honours) in Early

This task forms part of a unit dedicated to Maltese pedagogy in the early years, delivered by Dr Melanie Darmanin. As part of their assessment, MCAST students are guided to write an original story in Maltese for kindergarten children, presented in a big book format. This hands-on task encourages students to develop their creative abilities and helps them refine their story-writing skills for educational purposes.





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The full potential of this project is realised during teaching placements, where the students present and read their big books, linking the stories to meaningful learning opportunities. This practical exercise enables them to gather constructive feedback from their classmates, the unit lecturer, the placement tutors, and, most importantly, the children themselves. This initiative was recently enriched through a collaboration with the National Literacy Agency, enabling our students to see their stories published nationally.

Four books were selected for this partnership: 'Pina u x-Xadina I-Vjola' authored by Erika Cassar, 'L- Avventuri ta' Valentina man-Nanna' by Rebecca Cremona, 'Vjoletta ż-Żebra bi Strixxi Differenti' by Sherise Galea, and 'Nella n-Naħla' by Maxine Manicaro. The selection process was initiated by a board of reviewers comprising Dr Mario Cardona, Ann Marie Cassar, Elaine Attard, Christine Schembri and Dr Melanie Darmanin. The National Literacy Agency conducted a second selection round.

Once published, the big books were distributed to primary schools around Malta and Gozo. On behalf of the Institute of Community Services, we would like to take this opportunity to congratulate the students on the publication of their first children's book in Maltese. May this achievement inspire other MCAST students to recognise the value of their work and motivate them to pursue their aspirations.







# STAFF TRANSITIONS TO MCAST: IMPACT ON STUDENTS



# BY DR CLAIRE SCIBERRAS, SENIOR LECTURER II, INCLUSIVE EDUCATION COORDINATOR

This reflection outlines my 21-year journey through various educational roles I held within Maltese state schools, culminating in my recent appointment as Head of Department (Inclusion).

As I begin my role as a Senior Lecturer at the Institute of Community Services (ICS), I view this transition as a valuable opportunity to contribute to MCAST's mission of providing high-quality and relevant vocational and professional education. My goal is to enhance the learning experience for our students. Through my involvement in implementing inclusive educational policies, I have gained significant insights into the diverse needs of students, which I am eager to share with those studying at the Institute of Community Services.

Throughout my career, I have collaborated with various stakeholders, including members of school leadership teams, teachers, learning support educators (LSEs) and external professionals such as occupational therapists, speech therapists and psychologists. These collaborative efforts have been instrumental in developing personalised educational strategies, including individualised education plans (IEPs) and transition programmes tailored to the unique strengths and challenges of students. By integrating these insights related to transdisciplinary teamwork into my pedagogy, I aim to forward these essential collaborative skills to my current students, as these are necessary to support a diverse learner population. Encouraging students to reflect on their practices and consider the applicability of these strategies in their future roles will enhance their development and implementation of inclusive educational approaches. As I explore collaborative practices within the classroom, I need to emphasise accountability and focus on the importance of intrinsic motivation within partnerships, especially between teachers and LSEs. By sharing my experiences and research on this topic (Sciberras and Schembri, 2020), I aim to inspire students to cultivate partnerships that lead to comprehensive educational solutions, effectively addressing the complexities inherent in classroom environments.

Highlighting the significance of open communication channels with parents—who are vital advocates for their children—will be crucial, as they possess the most profound understanding of their children's needs.

By linking first-hand real-world scenarios emerging from my experience in Maltese state schools to these themes, I hope to stimulate relevant discussions that equip future educators studying at MCAST with valuable perspectives and inclusive strategies. As I write this reflection, I hope that my recent appointment at MCAST provides an invaluable platform to share insights and pass this knowledge and experience on to my students.

I remain committed to empowering future educators to cultivate nurturing and effective learning environments for all students irrespective of their abilities, race, gender, socioeconomic status, sexual orientation, ethnicity, language and culture. This reflection illustrates the profound impact that educators transitioning can have on enriching student learning experiences at MCAST.

# CULTIVATING FUTURE PROFESSIONALS – AN INTERVIEW WITH REDENT BALZAN, HUMAN RESOURCES DIVISIONAL MANAGER AT ENEMALTA BY CORYSE BORG, CONTENT WRITER

Enemalta has been a committed supporter of work-based learning, offering MCAST students invaluable hands-on experience. Divisional Manager of Human Resources, Redent Balzan, discusses the benefits of this programme, the skills students bring to the workforce, and the company's commitment to shaping future professionals.

Enemalta has long recognised the value of work-based learning, regularly hosting students from MCAST for internships and apprenticeships across various departments.

According to Redent Balzan, Divisional Manager Human Resources at Enemalta, these students are seamlessly integrated into the workforce and play an important role within the company.

"Every year, we welcome a sustainable number of students, particularly in electrical engineering, finance and construction," Mr Balzan explains. "At the moment, we have around 25 MCAST students training with us, and many of them go on to become full-time employees."

Work-based learning is a key pillar in preparing students for the realities of professional life. Mr Balzan emphasises that induction and training play a critical role in equipping students with the necessary technical and practical knowledge.

#### The Benefits of Work-Based Learning

"It is essential for students to experience a blend of academic learning and on-the-job training," he notes. "Seeing and working with our equipment first hand gives them a strong foundation that will benefit them throughout their careers."



For both students and employers, work-based learning presents a host of advantages. Enemalta, with an average workforce age of 47, benefits from the fresh perspectives and digital skills that younger employees bring to the table.

"With apprentices as young as 16 or 18, we see a real injection of new ideas," Mr Balzan says. "For example, as we work towards digitalising our processes and moving towards a paperless system, these students, who are digital natives, contribute significantly with their knowledge of modern technology."

#### **Innovation and Fresh Perspectives**

Beyond technical skills, MCAST students also bring valuable administrative and problem-solving abilities. Their academic background enables them to introduce innovative solutions that can enhance efficiency within the company.



"They often offer an outsider's perspective, which can be very beneficial," Mr Balzan states. "For example, instead of relying on email communications, a student once proposed an online shared training calendar, ensuring that no one missed important updates. These small changes can make a big difference."

"As someone responsible for the HR needs of 600 employees, I see this as a must," he asserts. "Of the 25 vacancies we fill each year, over half are taken by apprentices. Investing in training these young professionals is not a waste of time - it's an invaluable asset."

#### **Long-Term Commitment to Apprenticeships**

Enemalta is committed to offering long-term opportunities to its apprentices, maintaining Memorandums of Understanding (MoUs) with both MCAST and the University of Malta to facilitate smoother transitions from education to employment.

"The younger they join, the more likely they are to stay with us," Mr Balzan notes. "If they are trained in a familiar environment, they develop a strong connection to the company."

Through its robust apprenticeship programme, Enemalta continues to demonstrate a commitment to fostering young talent, ensuring that the next generation of professionals is equipped with both the knowledge and the practical skills to thrive in the industry.

## **BRIDGING THEORY AND** PRACTICE: THE ROLE OF APPLIED LEARNING IN **VOCATIONAL EDUCATION AND TRAINING** BY ANTHONY PADOVANI, DEPUTY **DIRECTOR INSTITUTE OF BUSINESS MANAGEMENT AND COMMERCE**

Applied learning has become a cornerstone of modern vocational education and training (VET) curricula, providing learners with the opportunity to acquire practical skills and competencies that align directly with industry needs. Through methods such as apprenticeships, internships, placements, and reallife industry case studies, applied learning effectively bridges the gap between theoretical knowledge and workplace realities. This approach fosters job readiness and promotes lifelong learning.

The integration of applied learning begins with curriculum design. MCAST collaborates closely with local industry partners to identify essential skills and competencies required in the labour market. These insights shape programme learning outcomes and unit content, ensuring relevance and alignment with employment demands. Practical components are also interwoven with theoretical content, enabling learners to apply what they learn in simulated or realworld settings. A programme in marketing might include training in data collection, while an accounting programme would include hands-on training on accounting software widely used in industry.

At the Institute of Business Management and Commerce (IBMC), apprenticeships within its MQF Level 4 programmes (Business Administration, Accounting, Marketing, and Finance and Insurance) are a hallmark of applied learning, providing structured, long-term training that combines classroom instruction with paid, on-the-job experience. Whilst on their apprenticeship, students are supervised by their line manager at their place of work and also by Institute appointed supervisors who visit the students regularly. In this

way, students progressively take on responsibilities as they gain confidence and competence. This dual model benefits both learners and employers since apprentices develop industry-specific expertise, while businesses nurture talent tailored to their specific operational needs.

Internships are another vital component of applied learning. They are typically shorter than apprenticeships but equally impactful. At IBMC, all MQF Level 6 students are required to spend a minimum of 200 hours in industry within a role that is compatible with their field of study. In this way, MCAST ensures that all of its first degree graduates enter the world of work with a measure of experience and preparedness so they hit the ground running on taking up their roles in industry after graduating. Internship offers students a taste of professional environments, enabling them to explore career options, build networks and develop workplace etiquette. For VET students, internships provide an avenue to test their skills in real-world scenarios, receive constructive feedback and refine their abilities. For example, an MCAST Business Enterprise intern might follow the execution of a business plan, while a Financial Services intern could assist in drawing up investment options. Such experiences bolster employability by equipping students with a blend of technical and soft skills.

Another avenue that IBMC students follow in becoming workplace-ready is by merging classroom knowledge with industry experience to address real-life industry cases thereby simulating real workplace challenges. By analysing actual scenarios faced by organisations, students develop problem-solving, critical thinking and decision-making skills. Case studies encourage learners to apply theoretical concepts to practical problems, bridging the gap between abstract knowledge and actionable industry appropriate solutions. For instance, a business administration programme might include a case study on supply chain disruptions, challenging students to devise strategies for resilience and continuity.

Integrating applied learning into MCAST VET programme curricula yields numerous benefits. Learners gain hands-on experience, enhancing their confidence and competence. They also build professional networks, facilitating smoother transitions to the workforce. Employers benefit from a pipeline of job-ready talent, reducing recruitment and training costs. Furthermore, applied learning fosters

adaptability, equipping learners with skills to navigate evolving industry landscapes.

Applied learning at MCAST is a vital pillar of vocational education and training, ensuring that curricula remain relevant and responsive to industry needs and developments. Through apprenticeships, internships and real-life case studies. MCAST students develop

the practical skills and professional mindset required to thrive in their chosen fields. By embracing applied learning. MCAST plays a crucial role in shaping and supplying a skilled, adaptable and future-ready workforce for Malta's industries.



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#### BY STEPHANIA CIAPPARA, QUANTITY SURVEYING MANAGER MCAST CAPITAL PROJECTS OFFICE

I recently attended the International Week at South-Eastern Finland University of Applied Sciences (Xamk) in Kotka, Finland, alongside three colleagues from MCAST and participants from various European universities. The programme focused on multicultural discussions in social and health care, integration processes, and intercultural communication.

Xamk primarily offers education in Finnish, but it has introduced a compulsory English language requirement for local students. International students studying at Xamk are also encouraged to learn Finnish, which is crucial for integrating with the local community, even if they are proficient in English. This approach highlights the importance of promoting the Maltese language for foreigners at MCAST, both for educational purposes and to foster healthier integration.

Xamk implements integration activities both on and off campus, such as group cycling, beach gatherings, and cultural experiences like Finnish cuisine and karaoke. The university operates across four campuses in Kotka, Kouvola, Mikkeli, and Savonlinna.

During our visit, we toured the new campus adjacent to the Maritime Centre Vellamo. The Kotka Campus is notable for its specialized nursing programme, featuring advanced laboratories and simulation spaces.

As part of the Capital Projects Office, my focus was on the significance of providing quality education to all students and appreciating the benefits of EU funding in constructing new facilities and enhancing the quality of life for MCAST students. I was impressed by the Finnish emphasis on punctuality, as being late without a valid reason is considered impolite in Finland.





#### BY KAIJI MA

I recently completed a 3-week Erasmus project in Lithuania, an experience that left an indelible mark on me. The country's beauty and the warmth of its people made it one of the most memorable experiences of my life, and I am eager to share it with you.

During my stay, I was warmly welcomed by a company specialising in aircraft component repair, in Vilnius. There, I gained invaluable hands-on experience in disassembling, maintaining and assembling aircraft tyres, as well as disassembling and assembling the brakes of aircraft landing gear. I learned to inspect and check bolts, nuts, washers, O-rings and other components, which required meticulous attention to detail. Collaborating with my colleagues to assemble the tyre and brake systems was a highlight, as this demanded teamwork due to their complexity, size and weight. Additionally, I refined my skills in using locking wire to secure nuts, deepening my understanding of brake structures and components.

Beyond the professional experience, I immersed myself in the local culture. In my free time, I savoured traditional Lithuanian cuisine with friends, including Chinkila with mushroom sauce and the iconic Cepelinai. We explored numerous cultural sites, such as the National Museum - Palace of the Grand Dukes of Lithuania, Vilnius University and the Railway Museum. Visits to the Historical Park, the courtyard of the Presidential Palace, and the famous Gediminas Tower, which offers breathtaking views of the city, were particularly memorable. As I wandered through the streets, I often encountered traditional performances that reflected the city's rich history and artistic atmosphere. I even stumbled upon a marathon where local citizens participated enthusiastically, some with their babies, which filled me with joy and energy.

If you are considering a train journey, Trakai, about 25 kilometres away, is a great option. You can enjoy beautiful natural scenery and visit the 14th century Trakai Castle, with its rich exhibits and unique architecture, which is truly captivating.

This Erasmus project in Lithuania provided me with invaluable work experience and practical skills while immersing me in the local culture, food and lifestyle. It enhanced my independence significantly and taught me how to balance work and travel, improving my overall abilities. Participating in an exchange programme allows you to experience things you have never encountered before, and I believe this journey in Lithuania is one worth cherishing and remembering.







## A COLLABORATIVE APPROACH TO EMPOWER EDUCATORS IN AN AI-DRIVEN FUTURE BY DR JUDITA TOMASKINOVA, DEPUTY DIRECTOR, APPLIED RESEARCH AND INNOVATION CENTRE

MCAST's active participation in international projects demonstrates its ongoing commitment to advancing education, fostering research, driving innovation and promoting sustainable development. Underpinned by its focus on strengthening strategic networking, the Applied Research and Innovation Centre (ARIC) plays a pivotal role in leading these initiatives. One of ARIC's primary objectives is to assist MCAST researchers in establishing international networks, facilitating collaboration and professional engagement with other scholars and key stakeholders across various fields. By fostering these valuable connections, researchers gain the ability to exchange knowledge, share resources, and explore innovative ideas. Furthermore, they benefit from gaining insights and perspectives from leading professionals worldwide. Additionally, through a 'network of networks' approach, ARIC enables academics to expand research opportunities, engage more deeply in R&I initiatives, and sharpen their skills, thereby elevating their professional profiles. These strategic partnerships reinforce MCAST's broader mission of supporting academic excellence, advancing research, and addressing today's global challenges.

A milestone in this journey was marked by ARIC's participation in the 16th Annual International Conference on Education and New Learning Technologies (EDULEARN24), held in Palma de Mallorca in 2024. At this prestigious event, a collaborative team from the University of Twente, ADAPT Centre/Dublin City University, Learning Hub Friesland, and Mendel University in Brno, led by MCAST's ARIC, introduced the 'ZENITH' framework. This innovative model has been designed as a transformative tool to equip educators with the skills and knowledge necessary to thrive in an Al-driven world.

# The ZENITH Framework: A collaborative innovation for educational transformation

The ZENITH framework is a product of deep collaboration between leading institutions across

Europe, with MCAST's ARIC playing a leading role in its development. The framework addresses a critical challenge: while AI offers immense potential to enhance learning outcomes, its uneven and fragmented adoption across educational institutions has created a significant gap between its promise and its practical implementation. Many educators remain unprepared to leverage AI effectively due to disparities in training, resources, and technological readiness.

ZENITH aims to bridge these gaps by offering a structured, six-pillar approach that fosters educator empowerment, interdisciplinary collaboration, and sustainable technological integration. Each pillar represents a step towards setting up the final operational framework which, once it is implemented and takes effect, is expected to strongly contribute to a future where AI may be seamlessly woven into educational practices, enhancing both teaching methods and learning outcomes.

#### Empowering educators for the AI era

At the heart of ZENITH is the recognition that educators are the cornerstone of successful AI integration in classrooms. The framework underscores the importance of equipping educators with not only technical skills but also the critical soft skills required to navigate the complexities of AI technologies. It focuses on fostering a supportive ecosystem where educators are provided with continuous professional development, networking opportunities, and handson experiences with AI tools.

This holistic approach ensures that educators are not merely consumers of AI technologies but active participants in shaping how AI is used to enhance learning. By promoting ethical considerations, collaborative learning, and real-world applications, the ZENITH framework creates a foundation for sustainable educational innovation.

#### Shaping the future of education

The ZENITH framework (Fig. 1) presents a promising pathway for the effective integration of AI into education (AIED). Its comprehensive approach seeks to ensure that educators are not simply passive users of AI technologies but active contributors in shaping the application of such technologies to enhance critical thinking, creativity, and problem-solving within educational environments. By focusing on ethics,

collaboration, and ongoing professional development, the framework aims to enable educators to better navigate the evolving Al landscape.

While ZENITH is still a theoretical framework at this stage, it is built on a proactive, bottom-up transformation approach, driven by the collaboration team. This approach fosters change from the grassroots level, emphasizing the role of educators in influencing Al integration. The framework provides a foundation for future research and practice that could contribute to sustainable educational development and better prepare institutions to meet the challenges and opportunities of an Al-driven future. The successful integration of AI into teaching and learning will require a collaborative effort between all the component elements of those institutions that move ahead with its adoption, with multiple initiatives working in parallel. The framework provides a valuable starting point, but broader initiatives must be in place to fully address the training of educators and the shift in mindset required for effective AI integration across educational institutions.

The discussions and initiatives from EDULEARN24 underscore the pressing need for an educational transformation that harnesses the power of AI to improve learning outcomes and prepare the workforce for an AI-driven future. The shift from 'AI for Education' to 'Education for AI' represents a pivotal moment in rethinking how we approach teaching and learning. This transition holds the potential to reshape our reality, fostering a future where technology and human creativity collaborate seamlessly.



Attendance of Dr. Judita Tomaskinova at the 16th Annual International Conference on Education and New Learning Technologies (EDULEARN24), held in Palma de Mallorca, 2024

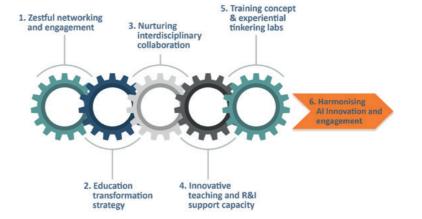


Fig 1: ZENITH Framework

# TRANSITIONING FROM INDUSTRY TO VPET - THE EXPERIENCE OF THREE GOZO CAMPUS LECTURERS

The article presents the experiences and reflections of three female Senior Lecturers who teach in different vocational sectors at the Gozo Campus. These lecturers share a common background, having joined MCAST after working in industry. They share details about their transition and explain how their industrial experience ultimately benefits the students.



# THE IMPORTANCE OF INDUSTRY EXPERIENCE IN SHAPING EFFECTIVE ACCOUNTING EDUCATION BY FRANCESCA CARUANA, SENIOR LECTURER (ACCOUNTING), MCAST GOZO CAMPUS

My career journey in accounting has been diverse and rich. After graduating from the University of Malta in 2011, I embarked on a ten-year journey in the industry, gaining crucial insights while working at KPMG and as an Accountant and Internal Auditor for the Gozo Curia, among other places. These positions exposed me to the vibrant realities of the accounting field, ranging from audits and financial reporting at a prominent firm to addressing the financial issues of a non-profit organization. This practical experience has greatly influenced my teaching methods at MCAST, where I currently guide students pursuing the Level 4 Diploma in Accountancy and ACCA courses.

My industry experience has allowed me to connect with the challenges that aspiring accounting professionals face. I understand the importance of developing practical skills such as critical thinking, problem-solving, and effective communication, which are essential for success in today's competitive job market. I strive to create a learning environment that mirrors workplace realities by incorporating real-world case studies, simulations, and collaborative projects that reflect the challenges they will encounter in their professional future.

I maintain a strong connection with the evolving accounting landscape by actively engaging with industry developments, including the latest accounting standards, regulatory changes, and technological advancements. This commitment ensures that the information I share with my students remains current and relevant, equipping them with the dynamic and ever-changing demands of the profession.

My diverse industry experience has played a pivotal role in shaping my teaching philosophy. By linking theoretical knowledge with practical application, I aim to prepare my students with the critical skills, insights, and knowledge necessary for them to excel in their future accounting careers. I believe that by fostering a learning environment that reflects the realities of the profession, I am not just imparting knowledge but also motivating and empowering the next generation of accounting professionals.

# FROM THE SOFTWARE DEVELOPMENT INDUSTRY TO LECTURING AT MCAST BY ELISE ANN GALEA, SENIOR LECTURER (ICT AND SOFTWARE DEVELOPMENT), MCAST GOZO CAMPUS

Before transitioning into vocational education and training (VPET), I worked at Ixaris, a company specializing in online payment platforms and B2B travel card issuance. I started as a junior Java Programmer, progressing to manage larger projects. I was then appointed Systems Analyst, focusing on designing solutions from a user and functionality perspective. Later, I became a Product Owner, working closely with clients and gaining a comprehensive understanding of project processes. This diverse experience allowed me to develop a broad understanding of project management and client interaction.

Now, I bring that industry knowledge into the lecture room, aiming to bridge the gap between academic learning and the real-world skills students need to succeed in their first jobs.

One of the biggest challenges I have observed is the disconnect between what students learn and how they apply it in the workplace. As someone with industry experience, I strive to close that gap. It is deeply rewarding to see students benefit from practical insights and real-life examples that complement the curriculum.

Beyond technical skills, there is another crucial area where the classroom often falls short: professional attitude and social skills. Many ICT students assume that a career in development means working solo, remotely, with little to no social interaction. In reality, teamwork, communication, and collaboration are at the heart of most ICT roles. That is why I emphasize activities like presentations and group projects. These not only build confidence but also develop essential soft skills—like articulating ideas, convincing others, and thriving in a team environment. These skills,

though not explicitly part of the curriculum, are vital for success in any career.

By blending practical experience with teaching, I aim to inspire my students to see learning as a tool for their future—not just a requirement.



# REFLECTIONS ON MY TRANSITION FROM CLINICAL RESEARCH AND SCIENTIFIC REGULATION TO LECTURING AT MCAST BY MARIELLA CIANTAR, SENIOR LECTURER (HEALTH SCIENCIES), MCAST GOZO CAMPUS

After graduating from the University of Malta with a Bachelor of Science (Honours) in Biology and Chemistry, I gained diverse experience in an international clinical research organization, the education sector and the scientific regulatory field. This background has been instrumental in my role as a health sciences lecturer, allowing me to blend practical experience in clinical research, regulatory science and science education.

My transition from working in health information technology and clinical research to lecturing at a

vocational institution has been fulfilling, enabling me to pursue my passion for education. My scientific background emphasizes skills like scientific inquiry, critical thinking and problem-solving, which I impart to students. As a Clinical Research Associate at IQVIA, I gained insights into global clinical research, enhancing students' awareness of global health challenges.

My experience has refined my pedagogical approach, creating engaging and inclusive learning environments. I aim to prepare students for careers in healthcare by imparting industry-relevant skills and perspectives, fostering a deeper understanding of the healthcare sector.



# AN INTERNSHIP EXPERIENCE IN SWEDEN

Christian Anatoly Grima, an Advanced Diploma in Electrical Systems student at the MCAST Gozo Campus, had the opportunity to undertake an internship with Linback AB, an electrical company based in Gothenburg, Sweden. This internship took place during August and September 2024, following his first year of study. The experience was facilitated by the Gozo Campus' networking contacts with Hulebacks-Gymnasiet College in Gothenburg.



### BY CHRISTIAN ANATOLY GRIMA, ADVANCED DIPLOMA IN ELECTRICAL SYSTEMS STUDENT

As part of his apprenticeship-based course, Christian is now an apprentice with Enemalta. This internship provided him with additional enriching work experience, allowing him to understand first hand the differences in electrical installation practices between Malta and Sweden. The internship period was arranged through the MCAST International Office and the AWBL Department, ensuring it counted towards his AWBL attendance.

The experience was holistic, offering Christian the chance to explore Sweden and make new connections. The welcoming staff at Linback AB made the experience even more memorable. MCAST encourages students to take on such opportunities, as they equip them with the technical and transversal skills essential for today's industry needs.









#### BY KURT MARKHAM

I started working at the Lascaris War Rooms over the summer, and whilst at a staff bar crawl I got talking to my boss, as well as site curator, Nathaniel Calleja Gera, about his time at MCAST.

Nathaniel's journey from studying aviation operations at MCAST to becoming a museum curator is a testament to the versatility of education and the unexpected ways it can shape a career. Initially drawn to aviation due to a lifelong fascination with aircraft, Nate enrolled in MCAST's Advanced Diploma in Aviation Operations after a brief stint studying history. The decision was inspired by a colleague at Malta International Airport, where he worked part-time as a security assistant.

At MCAST. Nate found a balance between technical training and personal growth. The course, though focused on modern airport operations, allowed him to explore his passion for history. For one assignment, he delivered a presentation on Malta's historic airfields during World War II, blending his academic and personal interests. One of the most challenging projects during his studies involved creating a simulated business proposal for an offshore wind farm. This group project honed his organizational and teamwork skills—

essential tools for his current role. Additionally, his apprenticeship at Malta International Airport taught him practical problem-solving, operational planning, and customer service skills that he now applies daily at the museum.

Nate credits his MCAST lecturers, particularly two retired aviation professionals, for inspiring him to aim high and remain passionate about his work. Their lessons on professionalism, storytelling and adaptability continue to guide him as he curates exhibitions and engages with visitors.

Today, Nate seamlessly combines his love for history and operational expertise, proving that even unexpected career paths can be deeply rewarding.





#### BY KATRYNA SAID

My journey into the world of software development began when I chose Information Technology (IT) as one of my subjects during the final three years of secondary school. This vocational subject allowed me to adopt a hands-on approach to learning, which not only deepened my passion for technology and programming but also laid the foundation for my future career.

Following my secondary education, I pursued an Advanced Diploma in Software Development. This course continued the hands-on learning approach, providing me with practical experience across all subjects. Building on this foundation, I then enrolled in a course leading to a Bachelor of Science (Honours) in Software Development. The work-based learning module of this course was particularly appealing, as I recognised the importance of experience in the field of software development.

Throughout my secondary school, diploma and bachelor's degree studies, I acquired fundamental knowledge in programming, web technologies and methodologies. However, it was during my apprenticeship at Parallels that I truly understood how to apply these concepts in real-world scenarios. Here, I had the opportunity to contribute to the product itself, collaborating with other engineers to develop various features. This experience was instrumental in my technical and professional growth.

At Parallels, I initially worked on the back end of the product before joining the web team to work on one of the web applications. This transition was particularly exciting, as I had been keen on web technologies since my early days in secondary school. Working closely with different teams allowed me to understand the complete lifecycle of the product, from design stages to implementation, release and delivery to customers.

During my apprenticeship, in College I was simultaneously learning concepts and practices which I would then apply directly to my projects. This seamless integration of theory and practice was invaluable, as it reinforced my understanding and application of the skills I was acquiring.

Another significant aspect of work-based learning is the opportunity for networking. Parallels' international



workforce taught me the importance of collaboration and effective communication. I learned how to communicate professionally with various parts of the organisation and had the chance to work alongside different developers under the guidance of experienced mentors. These mentors provided invaluable support as I tackled new challenges, helping me build a strong foundation in both technical skills, such as understanding the product and using Git, and essential skills like teamwork and problem-solving. This foundation made my transition into full-time employment much smoother, as I was already equipped to handle core responsibilities with confidence.

Throughout my studies and apprenticeship, I received unwavering support from my mentors at Parallels, both professionally and academically. By working diligently and building trust with my employer, I was able to work from home, saving time on commutes and enjoying a more flexible schedule that allowed me to balance work and studies effectively.

Upon completing my apprenticeship at Parallels, I was offered a full-time role, which I was thrilled to accept. This position has enabled me to work on projects that align with my passions and to continue to grow with a company that has played a pivotal role in shaping me into the software developer I am today. My journey from a passionate student to a professional front-end developer has been incredibly rewarding. I am deeply grateful for the opportunity to grow at Parallels, where work-based learning has successfully bridged the gap between education and employment, accelerating my growth and presence in the industry.

# MY RADIO APPRENTICESHIP EXPERIENCE



# BY ELENA FESTARI, MCAST JOURNALISM STUDENT, EX MCAST ICT STUDENT

Twenty-year-old Elena Festari recently completed a 100-hour apprenticeship with a local news station, working in the radio department. In an insightful interview, she discussed her experiences, challenges, and the invaluable lessons learned during her time there.

For many students, entering the professional world can be both exhilarating and daunting. Elena's journey exemplifies this duality, as she navigated the complexities of a real-world work environment while gaining practical skills. Her reflections highlight the importance of hands-on experience in bridging the gap between academic knowledge and professional application.

Elena emphasized that the apprenticeship not only enhanced her technical abilities but also fostered essential soft skills such as communication, teamwork and time management. Her story serves as an inspiration for other students contemplating similar opportunities, illustrating how apprenticeships can significantly impact personal and professional growth.

Elena described her apprenticeship as a gateway to understanding the fast-paced world of radio. "It was a completely new environment for me," she said. "I was excited but also a bit nervous because I did not know what to expect."

Her daily tasks ranged from assisting with show planning to gathering and verifying news stories. Elena explained that she was often tasked with conducting research, editing audio clips for broadcasts, and also designing posters for the radio programmes.

One of the most significant aspects of her apprenticeship was the hands-on learning experience. Elena recalled being surprised by the level of detail and preparation required for every broadcast. "Radio seems spontaneous when you listen to it, but there's so much planning behind the scenes. I learned that timing is everything." She was also introduced to technical aspects of radio production, such as operating soundboards and using editing software. Though technical skills were not her strong suit at the beginning, she embraced the challenge.

Like any new experience, Elena's apprenticeship was not without its difficulties. She admitted that balancing her apprenticeship with her academic commitments was tough at times. "There were moments when I felt overwhelmed, especially during busy weeks at MCAST. But this taught me how to prioritise and manage my time better."

While Elena's apprenticeship has ended, it has left her with a clearer vision of her future. "It's definitely made me consider a career in media," she said. "I love how radio connects with people directly and instantly. I'm not sure if I'll stick to radio specifically, but I know I want to be in a field where I can use my voice to inform and inspire."

Reflecting on her journey, Elena expressed gratitude for the opportunity and the mentors who guided her. "It wasn't just about the technical skills; it was also about building confidence and understanding the impact of what we do."

Elena Festari's story is a reminder of how internships and apprenticeships can be transformative. They offer young individuals not only practical skills but also a chance to discover their passions and potential. For Elena, those 100 hours were just the beginning of what promises to be an exciting journey ahead.



# THE POWER OF APPRENTICESHIPS BY ENRIQUE CAMILLERI, MCAST JOURNALISM STUDENT

Shanice Camilleri, a student pursuing a Bachelor's degree in Financial Services at MCAST in Malta, demonstrates how apprenticeships can effectively bridge theoretical knowledge and practical application in the fast-paced financial industry.

During an insightful interview, Shanice shared her experiences, challenges, and the valuable lessons she learned during her apprenticeship at Bank of Valletta. Apprenticeships in financial services provide invaluable skills and experiences. They offer opportunities to gain first-hand insight and real-world understanding of the job.

Shanice's academic journey began at MCAST, where she completed a Level 4 Diploma in Financial Services before progressing to a Bachelor of Science (Honours) degree in Financial Services Management. Driven by her passion for the financial sector, she sought practical experience and was drawn to Bank of Valletta

(BOV) for her apprenticeship. BOV's reputation as a leading financial institution in Malta and its dedication to mentoring students made it an ideal environment for Shanice to develop her career.

Over the span of one year and four months, Shanice Camilleri dedicated over 100 hours to her apprenticeship at Bank of Valletta (BOV), specifically in the Investment Operations Department. This role was crucial in ensuring smooth financial operations within the bank. Shanice was responsible for managing dividends and coupon payments for clients who invested in bonds and shares.

The apprenticeship provided her with hands-on experience that complemented her academic studies, allowing her to apply theoretical concepts in a practical environment. Through this role, she gained valuable insights into the intricacies of investment operations and the importance of accuracy in financial transactions. Shanice's experience exemplifies how apprenticeships can effectively prepare students for successful careers in finance.

Like any new experience, Shanice faced challenges during her apprenticeship.

This journey highlights the importance of mentorship and teamwork in helping young professionals navigate the complexities of the financial sector. As she adapted to her responsibilities, Shanice developed not only her technical skills but also her ability to cope with the pressures associated with managing financial transactions.

While the apprenticeship made Shanice grow in the finance sector, it also played a significant role in her personal development. She gained certain essential life skills such as responsibility, maturity, and stress management. These qualities have not only made her better at her position, but have also positively impacted her personal life.

Shanice's journey highlights the importance of work-based learning and the practical experience obtained from apprenticeships. For students considering a career in the finance industry, Shanice's experience is a prime example of what can be achieved with determination and passion.



# BY CLAYVIN SCICLUNA, MCAST JOURNALISM STUDENT

At just 18 years old, Clayvin Scicluna embarked on a remarkable 100-hour apprenticeship with a local news station, diving into the world of broadcasting. This hands-on journey allowed him to bridge the gap between theoretical knowledge and real-world application, a dream come true for a student passionate about media production.

Clayvin was fascinated by how stories came to life on screen and was thrilled to work with professional equipment. From day one, he was introduced to the intricacies of camera work, learning about operating broadcast cameras, understanding angles and capturing the perfect shot. He worked closely with seasoned professionals who guided him through the technical aspects of filming live events, interviews and news segments.

One of the most rewarding aspects of the apprenticeship was the hands-on learning experience. Clayvin participated actively in various tasks, gaining practical skills that textbooks could not teach. He learned to adjust camera settings for different lighting conditions, frame shots effectively, and troubleshoot technical issues on the fly. Each day presented new challenges and opportunities to learn.

In addition to mastering camera operations, Clayvin observed the collaborative nature of broadcasting. He noted how camera operators worked in sync with directors and producers. This gave him a deeper appreciation of teamwork and communication essential skills in any professional setting.

While the apprenticeship was exciting, it was not without challenges. Clayvin initially found adapting to the high-pressure environment of live broadcasting intimidating. However, with determination and support from his mentors, he built confidence to stay calm under pressure and make guick decisions when things did not go as planned.

Reflecting on his experience, Clayvin described the apprenticeship as a turning point in his career aspirations. The 100 hours he spent behind the camera solidified his passion for media production and gave him clarity about his future goals. He emphasized the importance of internships and apprenticeships



for young people exploring their career paths, and encouraged his peers to seek out similar opportunities for valuable insights and practical skills.

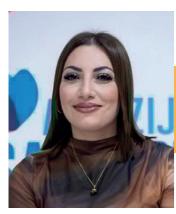
Clayvin's apprenticeship journey is a testament to the power of experiential learning. Through dedication, curiosity and hard work, he gained a wealth of knowledge that will serve him well as he embarks on his career in media. He concluded, "I'm incredibly grateful for this opportunity. It's an experience I'll carry with me for the rest of my life." For an 18-year-old with a dream, this apprenticeship was more than just 100 hours of work—it was the beginning of a promising iourney in the dynamic world of broadcasting.

WORK PLACEMENTS IN
SOCIAL CARE MANAGEMENT
- SHARING OF LEARNING
EXPERIENCE OF MCAST
PLACEMENT LECTURER
AND ALUMNI
BY MS ANTONELLA BRINCAT,
SENIOR LECTURER AND INSTITUTE
VOCATIONAL COORDINATOR,
INSTITUTE OF COMMUNITY SERVICES

The process of securing work placements for students in the Bachelor of Arts (Honours) Social Care Management programme begins at the start of the academic year. The Placement Lecturer, who specializes in Health and Social Care, takes the lead in identifying potential placements by contacting various organizations to inquire about available opportunities.

Despite the challenges, MCAST has consistently managed to secure placements for all students enrolled in the course. This ensures that each student gains valuable hands-on experience in different social care settings throughout their three-year programme.

Who could better explain the benefits of MCAST work placements if not the students themselves? Here is a collection of some experiences from nine (9) MCAST alumni:



ANTHEA SAMMUT COORDINATOR -AGENZIJA SAPPORT

My name is Anthea Sammut, and I graduated with a Bachelor of Arts (Honours) in Social Care Management in 2019. Over the past five years, I have been working at Agenzija Sapport, currently in the role of Coordinator. where I am responsible for one of the services the Agency offers to persons with disability and lead a team of professionals. During my time studying at MCAST, I had the opportunity to complete multiple placements at organisations such as Fondazzjoni Suret il-Bniedem, the Directorate for Quality and Standards in Education (DQSE), and the President's Foundation for the Wellbeing of Society, among others. These placements exposed me to various sectors and teams. including working hands-on as a support worker, an office administrator, a marketing assistant, and in roles within the management personnel. placements

exposed me to various sectors and teams, including working hands on as a support worker, an office administrator, a marketing assistant, and in roles pertaining to management personnel.

These experiences were life-changing, as I could see the connection between the theoretical knowledge I was learning at MCAST and its practical application in different service settings. Placements had provided me with a clear understanding of what a career in social care entailed, while also helping me broaden my knowledge, expanding my professional network, and gaining valuable hands-on experience. Most importantly, these placements prepared me not only for employment, but also for personal growth, and enabled me to face difficult situations with confidence. My advice to others entering this field is to approach the placement opportunities with an open mind, engage actively, offer their help, and take initiative. These experiences will shape them into a future professional in the social care sector.



ALESSIA GRECH ASSESSOR – SOCIAL CARE STANDARDS AUTHORITY

My name is Alessia Grech, and I hold a Bachelor of Arts (Honours) degree in Social Care Management, which I obtained from MCAST in November 2022. I am currently employed as an Assessor with the Social Care Standards Authority, working within the Inspectorate Unit.

My academic journey at MCAST began as a Foundation student at Level 2. This pathway gave me numerous placement opportunities across diverse settings, including Mater Dei Hospital, childcare centres, mental health services, substance misuse, the Social Care Standards Authority, and residences of children in alternative care. These experiences were instrumental in shaping my professional development.

My school placements enabled me to acquire and enhance critical skills such as problem-solving, time management, effective communication, teamwork, and professionalism. They also provided valuable insights into workplace dynamics, including interacting with diverse service users and collaborating within multidisciplinary teams.

Notably, my placement at the Richmond Foundation opened the door to my first professional role. I began working as a part-timer with the organization while continuing my studies at MCAST. Upon graduation, I transitioned into a full-time position at the Richmond Foundation. Subsequently, I had an opportunity to join the Social Care Standards Authority, where I currently work as an Assessor.

In my current role, I contribute to the Inspectorate Unit, which is one of the bridges connecting the Authority and service providers. By contributing to the Inspectorate Unit, I continuously develop a proactive approach to upholding high-quality care standards, which is crucial for my career growth in social care management and reinforces my commitment to advocating for service users' well-being.



ROXANA MARIA AZZOPARDI -PROGRAMME ADMINISTRATOR FOR THE STAR PROGRAMME -INSPIRE

I, Roxana Maria Azzopardi, graduated in 2022 with a Level 6 Bachelor of Arts (Honours) degree in Health and Social Care Management from MCAST. Currently, I am employed at Inspire, serving as Programme Administrator for the STAR programme.

During my degree studies, I completed various placements, including one at the Holy Family Home, a care home for the elderly in Naxxar, as well as placements at Kummissjoni Ejjew Għandi (Fondazzjoni Sebħ) and the Leap Centre. These experiences provided me with valuable insights into the professional workplace, teaching me to manage tasks effectively under pressure, maintain attention to detail, and collaborate within multi-professional teams. They also enhanced my ability to problem-solve, adapt quickly to changes, and handle diverse situations with confidence.

These skills have been instrumental in preparing me for my current full-time role, where I consistently apply what I learned to meet the demands of a dynamic work environment. My journey in this field began with a Level 4 Advanced Diploma in Health and Social Care (Social Care). One of my placements during this course was at Inspire, which left a lasting impression on me. I thoroughly enjoyed the experience and always aspired to work there full-time. After completing my degree, I was thrilled to achieve this goal and join Inspire, where I continue to grow both personally and professionally.

The combination of hands-on placements and the exceptional support from lecturers provided me with a solid foundation and prepared me for the realities of the professional world. The placements were particularly impactful, as they bridged the gap between theoretical knowledge and real-world practice, giving me invaluable exposure to the work environment.

# RACHEL GRIMA - PROJECTS COORDINATOR - THE MALTA FOUNDATION FOR THE WELLBEING OF SOCIETY

I graduated with a Bachelor's degree in Health and Social Care Management in 2022. During the three-year course, I had the opportunity to complete placements at the Aġenzija Appoġġ Social Work Services at Mater Dei Hospital and the Aġenzija Appoġġ Fostering Service.

These experiences prepared me for my career by exposing me to diverse realities and teaching me the importance of empathy while maintaining professional boundaries to safeguard my well-being. My placements confirmed my passion for this field, as I found great satisfaction in helping those in vulnerable situations. Through my placements I got to put into practice what I had learned and apply it in the work field.

My current position is that of Projects Coordinator at the Malta Foundation for the Wellbeing of Society, founded and chaired by Her Excellency Marie Louise Coleiro Preca. Here, I lead and support several projects undertaken by the Foundation and dedicate my time to advocating for child participation by investing in children and their families, and making a positive impact on society. Together with my team, my job allows me to listen to the needs of our society, and to push for policies to change accordingly in order to create a more inclusive, supportive, and equitable environment for all.

#### **EMMA BARBARA - CASE OFFICER**

My name is Emma Barbara, and I graduated in 2022. I am currently working as a Case Officer. During my placements at Dar Merħba Bik, Hospice Malta, the Child Protection Service, and the International Relations, Service Audits, Quality Assurance and Research Department, I engaged in hands-on work such as assisting at shelters, creating activities for service users, conducting research, performing house check-ups on families, conducting interviews, and shadowing professionals ranging from care workers to managers.

These experiences gave me valuable insights into the field, helping me discover my passion for supporting victims of domestic violence, conducting research, and managing activities and projects. The placements also provided a practical understanding that complemented my studies, guiding my career path and shaping my professional aspirations.



KIRSTY FARRUGIA GUIGA - STUDENT MENTOR - MCAST

My journey at MCAST began in 2014. This was one of the best and most rewarding choices I have made in my life. I was motivated by my interest in the caring profession, social issues, and domestic violence. I started reading for the Advanced Diploma in Social Care (Level 4) and furthered my studies in a Bachelor's degree in Health and Social Care (Management) (Level 6).

One of the highlights of my academic journey was the opportunity to undertake work placements, working with different client groups, youths and other handson experiences throughout these placements. These experiences proved instrumental in translating theoretical learning into practice: through them I was able to hone various skills, especially my sensitivity to the needs of others, and to strengthen my professional skills when dealing with challenging situations.

MCAST and the dedicated lecturers also pushed me forward to become an active student on campus, being one of the founding members of an LGBTIQ student-body on campus going by the name of Gay-straight Alliance MCAST (G-SAM). We worked on different events, training initiatives, and projects on campus, which was the start of my journey as an LGBTIQ and human rights activist.

Upon graduating from the course, I was thrilled to find employment as a student mentor at MCAST. The combination of my academic background and work placement experiences uniquely positioned me for this role, where I now have the privilege of guiding and supporting MCAST students myself on their own educational and personal journey. My role consists of supporting students who hail from different walks of life/society and have different needs and circumstances.

As I reflect, I draw upon the skills acquired through my coursework and placement experiences to be a more effective mentor. Whether it is fostering effective communication, demonstrating empathy and emotional intelligence, all of this continues to empower me to make a meaningful impact in my role and to eventually further my studies within the same field.

#### ELISA ZERAFA - DOMESTIC VIOLENCE RISK ASSESSOR - FSWS APPOĠĠ

During my placements, I had the opportunity to engage in a variety of activities that helped me gain practical experience in social care. At Fondazzjoni Sebħ, I contributed to fundraising efforts, designing posters and supporting events to raise awareness of the Foundation's work. At FSWS - Administration, I worked alongside the administrative team, gaining insight into the organizational processes that help deliver effective social services. My placement at Aġenzija Appoġġ - Way to Work involved helping individuals develop their skills, guiding them through training sessions, and assisting them in preparing for the workforce.

From these placements I learned the importance of a multi-faceted approach to social care, which combines direct client support with efficient organizational processes. The experience at Fondazzjoni Sebħ highlighted the significance of community engagement, while FSWS - Administration taught me about the crucial role of administrative work in ensuring smooth service delivery. The Aġenzija Appoġġ placement provided me with valuable skills in coaching and supporting individuals in improving their employability, making me appreciate how integral skill development is to social empowerment.

These placements were crucial in preparing me for my current role of Domestic Violence Risk Assessor. The variety of tasks I undertook, from working with clients to supporting behind-the-scenes administrative work, helped me develop a balanced skill set that I use daily. I became more adept at client communication, risk assessment, and understanding the broader systems of care that are necessary in social work. The hands-on experience allowed me to gain confidence and practical knowledge, ensuring I was job-ready upon graduation.

#### AMANDA GALEA - STUDENT MENTOR - MCAST

My name is Amanda Galea, and I am a 2018 graduate currently serving as a Student Mentor at MCAST, where I provide support to students throughout their academic journey. My educational path began in 2013 when I enrolled as a mature student at MCAST, embarking on a journey that would shape my future. I pursued a BTEC Extended Diploma in Health and Social Care (MQF Level 4), before continuing my studies with a Higher Diploma in Health and Social Care (Management). Ultimately, I completed a top-up course and earned a Bachelor of Arts (Honours) in Health and Social Care (Management).

Throughout my time at MCAST, I gained invaluable experience through a series of work placements across both governmental departments and NGOs. These placements provided me with the practical skills necessary to pursue a successful career in health and social care.

The placements taught me the importance of empathy, effective communication, and adaptability in diverse settings. From supporting vulnerable individuals to managing administrative responsibilities, I refined my problem-solving skills and learned to work both independently and as part of a team. These hands-on experiences across varied environments helped me develop a well-rounded skill set, preparing me for a rewarding career in health and social care. They also increased my confidence, sharpened my professional abilities, and solidified my dedication to this meaningful field.



BERNICE SCIBERRAS - REGISTRAR OF A JUDICIAL BOARD – COURTS OF MALTA

During my years at MCAST, from where, in 2018, I graduated with a Bachelor of Arts (Honours) in Social Care Management, I had the opportunity to conduct work placements at FSWS, Agenzija Sapport and FES.

During my placements, I gained diverse experiences across several organizations. At the Richmond Foundation's Paola hostel, I worked as a therapeutic aid supporting 11 male service users by helping them maintain independence. At Caritas Malta, I facilitated the Female Drug Rehabilitation Programme, leading sessions and ensuring adherence to the programme structure. The Malta Foundation for the Wellbeing of Society provided opportunities to develop administrative and event management skills through organising conferences and projects. At the Ministry of Justice and Local Councils. I engaged in administrative tasks and gained insight into the judicial system. Lastly, at Ghabex, which supports survivors of domestic violence and human trafficking, I provided emotional support and assisted with legal processes. These experiences collectively enhanced my understanding of mental health support, addiction recovery and the intersection of legal and social services.

Work placements also help you network and meet new people. I still remember that a few weeks before my last school year finished, I received a call from a colleague with whom I had worked at FSWS and she informed me that the EU project that I had assisted in a few years prior, had been granted the funds by the EU and was going to start operating that same summer. She gave me some information about the vacancy calls that were going to be issued and encouraged me to apply. My first job after graduating was in fact as a social mentor in this EU project. This would not have happened had I not been given the work placement opportunity.

# REFLECTIONS FROM STAFF WHO TRANSITIONED FROM INDUSTRY TO MCAST AND HOW THIS BENEFITS STUDENTS

# BY KARL MONTEBELLO, DEPUTY DIRECTOR, INSTITUTE OF APPLIED SCIENCES

Transitioning from the fast-paced demands of industry to the structured environment of MCAST in my current role of Deputy Director at the Institute of Applied Sciences, has been an enriching and transformative experience, offering opportunities to close the divide between education and the workforce.

My professional background in the local industry provided me with invaluable insights into how industry operates, its priorities and the challenges it faces. Leveraging this knowledge, I work to enhance the student experience through meaningful collaborations with employers, bridging the gap between academic theories and industry realities.

A key part of my role involves strengthening relationships with industry partners who host our students for work placements and apprenticeships. Through understanding and experiencing first hand the expertise and skills that industries currently lack or struggle to find, I am able to provide support towards tailoring partnerships that are mutually beneficial.

These collaborations not only provide students with high-quality, contextualized work-based learning opportunities, but also help employers cultivate a future workforce equipped with the skills they need. One of the most rewarding aspects of this transition is the ability to contextualise learning. Having worked in the private sector allows me to align MCAST's offerings with real-world demands.



This ensures that our students are not only well-prepared to enter the job market but also bring value to their employers from day one. By continuously fostering dialogue with key stakeholders, I help create a dynamic and responsive educational ecosystem that benefits students, MCAST and the industry as a whole. This enhances students' understanding and also equips them with the practical problem-solving skills employers seek. This blend of practical insights and academic rigour prepares the students to not just excel in exams but to thrive in their chosen careers, making this journey deeply fulfilling for educators and learners alike.

Ultimately, this transition from industry to MCAST has allowed me to contribute to shaping a future-ready workforce while addressing the current needs of employers thus contributing to the holistic development of students, making it a deeply rewarding journey.

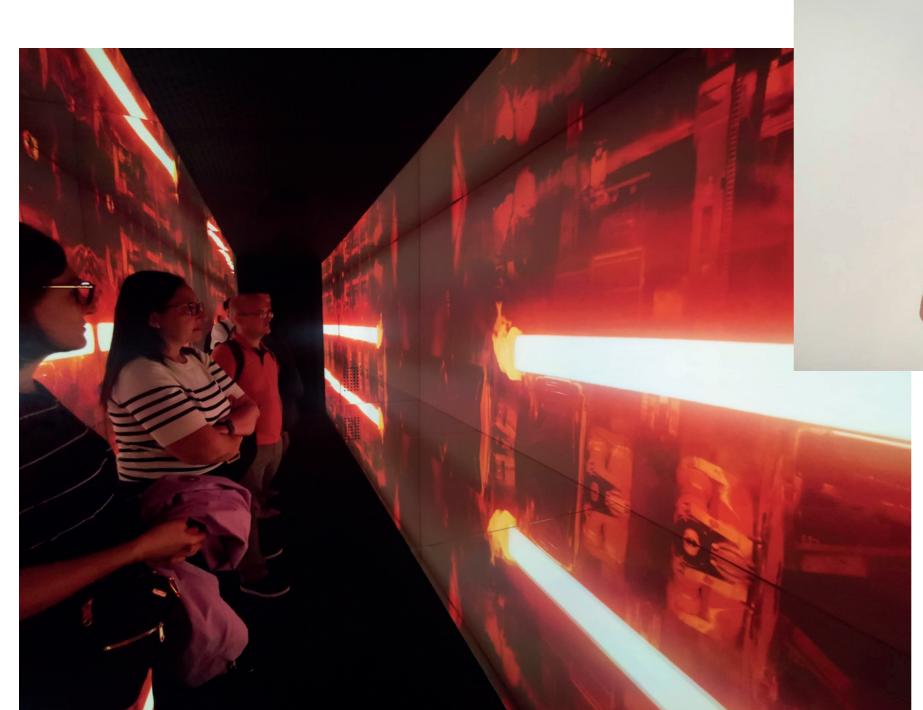
# EMPOWERING FUTURE ENGINEERS: MCAST LECTURERS' TRAINING IN MILAN ON ADVANCED INDUSTRY 4.0 TOOLS

Five engineering lecturers from MCAST embarked on an enriching professional development experience. Their mission was to receive specialised training on the newly acquired Festo CP Lab 410 equipment, a key tool in teaching the principles of Industry 4.0. Immersed in the innovative environment of the MIND Milano Innovation District, the team explored cutting-edge simulation tools, online learning platforms and advanced automation systems.

This article features contributions from each of the five lecturers, who share their individual experiences and key takeaways from the training. From mastering the Festo CP Lab 410 to exploring simulation software like CIROS and delving into the digital learning opportunities provided by Festo LX, these accounts collectively highlight how this training equips MCAST educators to prepare students for the future of manufacturing and engineering.

# INDUSTRY 4.0: REVOLUTIONISING MANUFACTURING THROUGH CYBER PHYSICAL SYSTEMS BY ING. DAVID MIFSUD

The fourth industrial revolution, often referred to as Industry 4.0, denotes the integration of the digital technologies with traditional industrial practices. At its core, Industry 4.0 fuses the internet of things (IoT), artificial intelligence (AI), big data and cyber physical systems (CPS) to create smart factories. These advanced systems enable real-time monitoring, decision-making and optimisation of manufacturing processes, resulting in enhanced productivity, efficiency and exceptional flexibility.



One way to effectively teach Industry 4.0 concepts is through the use of the Festo CP Lab 410. By investing in this education platform MCAST plans to increasingly provide its students with hands-on experience of the latest industrial technologies, bridging the gap between theoretical knowledge and practical applications. The Lab simulates a fully operational multi station smart factory environment, allowing students to experiment with IoT devices, sensors, and automated systems. Through interactive modules, learners gain insights into the intricacies of data analytics, system integration and flexible manufacturing systems (FMS).

During our training at the Festo Education in Milan we could observe how the Festo Cyber-physical system also emphasised collaboration and problem-solving skills in the students mirroring real-world industrial scenarios. By engaging with this cutting-edge technology, they will be better prepared to navigate the rapidly evolving landscape of modern manufacturing. As a result, the Lab serves as an additional tool in equipping the next generation of engineers and technicians with the skills necessary for the fourth industrial revolution.



#### FESTO CYBER PHYSICAL LAB BY ING. CLAIRE SEGUNA

Festo specializes in providing the educational sector with advanced training equipment that enables students to experience real-world industrial setups throughout their studies. This commitment to high-quality education led the Mechanical Engineering Department at the Institute of Engineering and Transport (IET) to invest in the Festo CP Lab 410-1. This robust educational platform offers MCAST IET students hands-on training in industrial automation, Industry 4.0 technologies and smart manufacturing systems. With its ten application modules, the CP Lab allows students to apply understanding of mechatronics, PLC programming, IoT, and data analysis in realistic industrial simulations, bridging the gap between classroom theory and practical application.

A key part of the implementation involved specialised training by Festo engineers, who introduced us to the CP Lab's advanced capabilities. This training included demonstrations of interconnected stations, illustrating data flow between modules and the impact of communication on overall system efficiency. Additionally, sessions on Industry 4.0 communication structures and programming covered the protocols and networks essential for seamless smart factory operations. This knowledge is crucial for students as they learn to set up and manage automation networks integral to intelligent Industry 4.0 processes.

With augmented reality (AR) capabilities, the CP Lab 410 further enhances learning by providing interactive digital twins, deepening students' understanding of complex operations. By working with the CP Lab 410-1, MCAST students are preparing for roles that require expertise in automation, connectivity, and digital transformation, and becoming equipped to become valuable contributors to the evolving Industry 4.0 landscape.

# EXPLORING SIMULATION SOFTWARE IN AUTOMATION BY ING. DUNCAN ZAMMIT

One focus of the visit to MIND was the advanced simulation software CIROS, and how it can revolutionize professional training in virtual learning environments.

CIROS is an industrially proven didactic tool platform designed for the creation and application of 3D

simulation models for automation technology. CIROS allows users to work with prefabricated models, industrial interfaces to robots and controllers.

During our visit, we had the opportunity to engage in hands-on training with CIROS. The training provided us with insights into how CIROS can be used to create detailed and realistic simulations of automation processes. We were also given an overview of how to build and manipulate 3D models, simulate complex automation tasks, and integrate various industrial components into our simulations.

A discussion on how the software can mirror real-world scenarios focused particularly on Flexible Manufacturing Systems, like the CP Lab 410 which was recently procured by the Institute of Engineering and Transport at MCAST. This system is an exemplary model for modern manufacturing processes, and CIROS enables us to simulate in a virtual environment allowing us to experiment with different configurations, optimize processes, and troubleshoot potential issues —without the risks associated with real-world testing.

Our visit enlightened us about the potential simulation software has as a tool for professional training in virtual learning environments, preparing us and our students for future industry challenges.

# HANDS-ON WITH FESTO LX: THE ADVANCED ONLINE LEARNING EXPERIENCE BY ING. BERNARD BRINCAT

MCAST lecturers of engineering now have a new tool to complement their lectures. Meet Festo LX, the online learning platform by Festo, a global leader in industrial automation.

Festo LX is an innovative online learning platform designed to bring advanced automation and engineering education to students worldwide. This platform offers interactive learning experiences tailored to modern technology and industry demands. The key appeal of Festo LX lies in its highly customizable modules that make learning both flexible and engaging. Students and educators can choose from a variety of learning paths focused on areas like robotics, pneumatics and digitalization. Each module combines multimedia resources, such as videos, animations and simulations, to create hands-on experiences that deepen students' understanding.

What sets Festo LX apart is its focus on preparing students for the rapidly evolving demands of Industry 4.0. Students gain practical knowledge and skills that are directly applicable to careers in automation and engineering. Festo LX offers an effective way to teach complex subjects with interactive resources that keep students engaged. It transforms traditional education by merging classroom learning with real-world applications, fostering creativity and problem-solving.

With tools like Festo LX, students are well equipped to become the next generation of engineers and innovators.

# MIND - MILANO INNOVATION DISTRICT BY ING. DAMIAN BRINCAT

The MIND Milano Innovation District is a cutting-edge urban area designed to foster innovation, sustainability, and social inclusion. Built on the former Expo Milano 2015 site, it aims to create a vibrant ecosystem where businesses, research institutions, startups and the community can thrive. Key features include an innovation hub, sustainable development mixed-use spaces, and a focus on research and education with institutions like Human Technopole and the University of Milan's Science Campus.

One fascinating aspect of MIND is the supermarket of the future, where hundreds of ceiling cameras track shoppers and their movements. This technology allows for an efficient, autonomous checkout process as items are automatically added to the bill when removed from shelves.

This experience has equipped us with valuable knowledge and a vision for future educational approaches that we are eager to implement at our College.





# THE VALUE OF WORK EXPERIENCE IN EDUCATION: A NECESSITY OR AN ADVANTAGE? BY TIMEA FAYE PISANI, MCAST JOURNALISM STUDENT

Work experience shapes us as individuals and helps us gain insight and learn further from others, but is it essential for studying a course? This question was asked to students who attend MCAST courses and work part-time in a company or business which is in their field of interest.



I decided to take a deeper look into this and interview a student about their personal experience. Gabriella Curmi is a 19-year-old Gozitan student, attending the Gozo MCAST full-time course in Children's Care, Learning and Development. As part of the course, one must spend a certain amount of time with children and Gabriella had several placements with young children at a day care centre. In the separate placements, she had a few weeks with a toddler and another few weeks with a baby. She thus learned how to manage children of different age groups and accommodate their individual needs.

When discussing with Gabriella, she told me that this was not her original plan for her future. Before this course, she was in ITS, studying to follow in her parents' footsteps in their restaurant business, but her experience there showed that she already knew a lot of content because of her upbringing, and she was not happy. In the following years, Gabriella wished to become a kindergarten teacher or any role which helped young children grow, become more independent and learn more about the world around them.

The biggest challenge for Gabriella was definitely transportation. Juggling College, placements and day care without a car required a lot of planning and travel time. On top of that, the placements themselves presented unique hurdles. Because some children were temporarily out sick, she had to adapt to new groups frequently, which meant quickly building rapport and adjusting her approach within limited timeframes. Assignments had to be completed within specific placement periods, so she often worked overtime to stay on track.

Working in the field while still in College taught Gabriella valuable time management skills and instilled a steady rhythm in her life, which benefitted her personal life and her family's restaurant. Collaborating with new people as a team enhanced her confidence and ability to unite with others to complete tasks effectively.

Overall, Gabriella is very happy with her experience, as working with children reinforced her passion for childcare and made her more excited about her future. The experience taught her a strong work ethic, provided useful life lessons, and further helped her structure her days and life.



# MCAST LINK ISSUE 71

# CHAMBER OF ENGINEERS AND MCAST SIGN MEMORANDUM OF UNDERSTANDING TO FURTHER ENGINEERING COLLABORATION



On January 27th, 2025, the Principal and CEO of the Malta College of Arts, Science and Technology (MCAST), Mr. Stephen Vella, and the President of the Chamber of Engineers (CoE), Ing. Malcolm Zammit, signed a Memorandum of Understanding (MoU) to formalise a strategic collaboration between the two organisations. This agreement aims to strengthen their partnership in advancing engineering careers, promoting technical exchanges, and enhancing international higher education and research opportunities.

This MoU builds on the steadily growing collaboration between CoE and MCAST. Both parties will collaborate to further international higher education and research, encourage and enable technical exchange related to engineering topics, and promote engineering careers. MCAST's commercial arm, MCAST Gateway to Industry (MG2i), also signed an agreement.

In recent years, the CoE and MCAST have engaged in an increasing number of collaborations, such as seminars and STEM outreach initiatives. This MoU will set the right conditions for a growing collaboration focused on engineering careers and the profession between MCAST's Institute of Engineering and Transport and the CoE, a voluntary professional body dedicated to representing both engineers and the engineering profession in Malta.

The signing occurred in the presence of the Institute of Engineering and Transport Director, Dr Ing. Stephen Sammut, joined by Deputy Directors Ing Carolina Sofia and Ing Anthony Bartolo and MG2i Operations Manager Brian Decelis.



MCAST celebrated the accomplishment of graduates on Campus in Paola and also at the Gozo Campus. The ceremonies marked a special time for all 2,964 graduates, who celebrated their success and academic achievements alongside their family and friends.

Institute for the Creative Arts and Institute of Applied Sciences graduates were the first to celebrate on 21st November 2024. President of the Board of Governors Horace Laudi, Principal and CEO Stephen Vella, Deputy Principals and staff members attended the ceremony presented by the Registrar Maria Pace.

Thirty-one graduation ceremonies were held, celebrating the success of students who followed courses ranging from MQF Level 1 entry-level certification to MQF Level 7 Master's Degrees.

This year, 589 students graduated at the Master's and Bachelor's levels. Moreover, 1,942 students completed Diplomas at Levels 3, 4, and 5, while 433 students completed Levels 1 and 2 courses.

Speaking during the official opening of the graduation ceremonies, MCAST Principal and CEO Stephen Vella said, "You have invested your time, energy and passion in your education, and it's now time to take those lessons into the world. As you leave this institution, remember that your education has equipped you with knowledge and skills to think critically and act compassionately." He encouraged students "to dream big, act boldly and create a future that reflects their values and aspirations. The world needs your voice, ideas and passion."







# MCAST HOSTS 6TH EDITION OF RESEARCH AND INNOVATION EXPO



MCAST, through its Centre for Applied Research and Innovation (ARIC), successfully hosted the 6th edition of its Research and Innovation EXPO on 25th and 26th November 2024 at the MCAST Resource Centre Auditorium. The event highlighted the array of research projects conducted by the College with a focus on how research is driving advancements in science, society, the environment, finance, industry and education.

Stephen Vella, MCAST Principal and CEO, highlighted the event's significance, saying, "The research projects presented at this EXPO show such varied themes, yet they share a common objective—supporting our society through challenging times with a social purpose, advancing and disseminating knowledge, testing ideas that aspire to positive change and finding solutions. At a time of global geopolitical tensions, climate change, and the rise of automation and Al, as a higher education institution, we must continue to strive for answers."

Deputy Principal for Research and Innovation Dr Tatjana Chircop reflected on the importance of inspiring the next generation of innovators and problem-solvers: "This EXPO is also about inspiring our students: the next generation of innovators and problem-solvers. As a College, we aim to empower our students to reach their full potential. By being role models, immersing ourselves in research, and sharing the fascinating world of exploration and discovery, we are sowing the seeds of knowledge acquisition and sharing within our students."

This year's EXPO featured presentations across a number of thematic tracks that included Cultural Contexts and Beyond, Exploring Marginality, Integrating New Approaches, Industry Collaboration and Innovation and Reshaping Education.

# THREE-DAY RESEARCH CONFERENCE ON QUALITATIVE RESEARCH

MCAST completed the third edition of the MCAST Qualitative Research Conference 2024, themed Beyond Boundaries through Applied Qualitative Research. The event, organised by the Applied Research and Innovation Centre (ARIC), focused on methodology implementation and the practical application of applied research, particularly within industry and society.

This year's conference featured research presentations across five thematic tracks: exploring cultural contexts, marginality, integrating new approaches, collaborating with industry, and reshaping education. The sessions examined how qualitative and mixed-methods research can address Malta's specific challenges as a small island while offering new perspectives to reshape industries and education systems.



In the conference opening, Principal and CEO Stephen Vella and Deputy Principal for Research and Innovation Dr Tatjana Chircop welcomed participants to the threeday initiative. International keynote speeches were delivered by international guest speakers, including Prof Helmi Järviluoma from the University of Eastern Finland, Christina Silver, Associate Professor from the University of Surrey, Prof Milada Šťastná from the Faculty of AgriSciences at Mendel University Brno and Prof Kahryn Hughes from the University of Leeds.

A highlight of the conference was the Doctoral Day event, which provided active and prospective candidates of the MCAST DRes doctoral programme with a platform to discuss the challenges and opportunities of pursuing doctoral studies. Participants engaged in insightful discussions about navigating research journeys and shared queries and experiences in an interactive setting. The doctoral programme, launched in June 2021, aimed to provide data and information that will help industry make evidence-based decisions.



# MCAST HOLDS I BELONG GRADUATION CEREMONY

The Malta College of Arts, Science and Technology (MCAST) recently held the graduation ceremony for the I Belong programme at its campus in Paola, where 351 students celebrated their achievements this year.

The I Belong programme is designed to assist international learners to integrate better into Maltese society. By successfully completing stage 2 courses, participants can meet the integration criteria set by Identità Malta, which is necessary for acquiring a long-term residence permit.

As part of the Migrant Integration Strategy and Action Plan (Vision 2020), the I Belong Programme helps in providing a holistic approach to integration. The programme provides participants with knowledge of the country's official languages and cultural awareness.

Together with the MCAST and the University of Malta, the Intercultural and Anti-Racism Unit offers Maltese and English language and Cultural Orientation courses at two stages. The language courses focus on daily use to facilitate a person's integration into society. The cultural orientation covers the social, cultural, economic, and historical aspects of Malta and the constitution, law and democratic values.

The programme helps broaden the local and international MCAST partner network, while acting as a key player in the local economic and social well-being spheres.



Students following courses at the MCAST participated in the IEEE Region 8 Robot Championship.

The IEEE Region 8 Robot Championship Malta 2024 was organised by the IEEE Malta Section, the IEEE Region 8, the IEEE Malta Computer Society, and the Professional and Educational Subcommittee on the 23rd and 24th of November 2024 at Montekristo Estate Arena Malta. Participation in this championship was open to all IEEE student branches in Region 8.

The aim of the event is to promote science, technology, engineering, and mathematics (STEM) among IEEE members, with a focus on STEM communication, entrepreneurship, creativity, problem-solving, and teamwork.

The team 'The Punisher' was composed of three MCAST students following the Bachelor of Engineering (Honours) in Electronics and Control Engineering at the Institute of Engineering and Transport (IET) namely, Ben Farrugia, Chris Saliba and Luke Camilleri. The students were mentored by Mr Isaac Massa, a senior lecturer at the Institute of Engineering and Transport.

The MCAST team won two recognition awards, namely, Most Effective Add-on and Best Looking Robot and Branding.

The IEEE Region 8 Robot Championship equips students with a blend of technical and soft skills, fosters an entrepreneurial spirit, and provides networking opportunities, all of which are instrumental in shaping their future career paths.

Through supporting and enabling such initiatives like the Region 8 Robot Championship, MCAST can significantly boost its image by showcasing innovation, strengthening industry ties, highlighting student success, enhancing alumni relations, promoting entrepreneurship, and increasing overall visibility.







# MCAST HOSTS PRESENTATION OF RESEARCH FELLOWSHIP SCHEME AWARDS

MCAST recently showcased four research projects that received a total of €106,570 through the Research Fellowship Scheme launched last March. This event underscored MCAST's commitment to fostering innovation through collaborative research between academia and industry.

President of the Board of Governors Horace Laudi addressed the audience, affirming MCAST's pivotal role in advancing Malta's research landscape. "Through this scheme, we're supporting innovation and contributing to the professional development of researchers who will shape Malta's future in high-value sectors. This fellowship complements our vision to create a robust, research-driven ecosystem at MCAST, bridging academic expertise with industrial application," said Mr Laudi.

The highlight of the event was the presentation of four projects supported by the fellowship:

COASTWISE, by Francesca Soster in collaboration with Discover the Blu, is a project focusing on sustainable coastal management. It is dedicated to safeguarding Malta's coastal resources through innovative research and awareness.

PlasmaSemiCon, by Dr Ing. Stephen Sammut, is a project being carried out in collaboration with STMicroelectronics, a semiconductor-focused project. Dr Ing. Sammut explained that PlasmaSemiCon aims to contribute to Malta's semiconductor industry potential.

DeFi & Al by Franco Farrugia, in collaboration with The Bit Research Company and Crypto Hub Malta, combines decentralised finance and artificial intelligence to harness the power of DeFi and Al to create more efficient, secure financial systems.

Sea2Tech, by Alexia Massa Gallucci and supported by Invent 3D Ltd., introduced a project centred on sustainable marine technologies, focusing on creating solutions that protect and enhance our marine environment.

The event provided a platform for more discussion about collaborative projects between academia and research and the need for sustainable funding models.

# INITIATIVE TO RAISE AWARENESS ABOUT ADHD HELD ON CAMPUS

MCAST recently hosted an event on its campus in Paola to raise awareness about Attention Deficit Hyperactivity Disorder (ADHD). This initiative was organized in collaboration with Aġenzija Żgħażagħ and the Kunsill Studenti MCAST (KSM).

The event featured interactive activities, including a penalty shootout competition, which encouraged student participation and created a lively atmosphere. Information booths were set up, and presentations were delivered to help attendees better understand ADHD and learn how they can contribute to a more inclusive environment.

This initiative provided a valuable platform for educating students about ADHD, its challenges, and the importance of support within the community.

This initiative provided a valuable platform for educating students about the condition, its challenges, and the importance of support within our community.

The College strongly believes in fostering an inclusive environment which provides the help and support needed to promote the well-being of all students and staff.



# MCAST HOSTS AN NSTF EVENT ON CAMPUS IN PAOLA

On November 1st, 2024, the MCAST hosted an event organized by the National Student Travel Foundation (NSTF) on its campus in Paola. This initiative, celebrating the 70th anniversary of collaboration between CERN and NSTF, featured a series of panel discussions with representatives from CERN and leading experts in science and technology.

NSTF aims to generate awareness and interest among students at all educational levels through non-formal educational programmes. During the event, MCAST Principal and CEO Mr. Stephen Vella emphasized the transformative power of education and research, stating that both CERN's contributions to scientific discovery and NSTF's commitment to advancing science education align closely with MCAST's mission. He highlighted MCAST's dedication to hands-on, practical learning, which fosters curiosity and prepares students for real-world challenges in science and technology.

Various topics were discussed during the event, including STEM education, experiential learning, evolving technologies, and the impact of a research facility within an educational institution. The event provided MCAST students with the opportunity to engage with industry experts, dive into groundbreaking research, and explore the future of science at CERN.

Three representatives from CERN namely, Mr Christoph Schaefer, Mr Kai Schweda, and Mr Ernest Sylwester, and NSTF Secretary General Mr Francis Stivala, attended the event at MCAST.



# MCAST PRINCIPAL ATTENDS 7TH MEETING OF THE EU4DUAL RECTORS' COUNCIL

Principal and CEO of MCAST Mr. Stephen Vella attended the 7th meeting of the EU4Dual Rectors' Council on November 6th, 2024. The meeting was held at the Baden-Wuerttemberg Cooperative State University (DHBW) in Stuttgart, Germany, which is recognized as the first higher education institution in Germany to integrate academic studies with workplace training. Deputy Principal Mr. Ronald Curmi accompanied the delegation.

The 7th meeting of the EU4Dual Rectors' Council marked another significant step in the alliance's collective journey to advance dual education across Europe. As part of the European Universities Initiative, this meeting provided a platform for discussion, decision-making, and strategic alignment within the alliance.

The council discussed key policy matters and approved

the EU4Dual value statement, and the alliance sustainability strategy, aligning our shared values and ensuring environmental, social and financial integrity within the alliance.

During the meeting updates were presented on the progress of the joint dual master's (JDM) programmes, and the council approved the initiation of the accreditation process for the JDM in Digital and Sustainable Manufacturing Engineering. Additionally, updates were shared on the joint industrial Ph.D. programme and the EU4Dual mobility programme, both of which play central roles in enhancing cross-institutional collaboration and facilitating student mobility.

Moreover, several challenges were also discussed, including navigating national regulations around funding, and maintaining decision-making autonomy within the consortium.

All Rectors agreed on establishing a Legal Entity which will enhance collaboration, branding, and stability within the alliance, positioning EU4Dual as a leader in dual education across Europe.

# A TEACHING VISIT TO BUDAPEST

In September 2024, Dr. Mario Cardona, along with lecturers Mr. Mario Schembri and Mr. Alex Caruana, organized a teaching visit to Budapest for ten students: Kyle Incorvaja, Matthias Bonanno, Alan Magro, Darren Karl Borg, Tristan Lee Zerafa, Emman Pace, André Spiteri, Sheldon Borg, Glenn Agius, and Gabriel Camilleri. This visit complemented their study unit on Historic Construction Technology from the previous semester.

Dr. Cardona's enthusiasm greatly enhanced the students' understanding of architectural landmarks, fostering a deeper appreciation for architecture and its impact on the built environment.

The trip began with a visit to the Basilica of St. Stephen, an exemplary model of baroque architecture. While there, the students explored the Basilica's museum, which housed various ecclesiastical artefacts. They also had the unique opportunity to climb between the dome's inner and outer structures and walk around the outer balcony of the dome, offering them breathtaking views of Budapest.





# ASTROBEAT: PIONEERING COLD WELDING RESEARCH ABOARD THE INTERNATIONAL SPACE STATION

The ASTROBEAT project, funded by Xjenza Malta and conducted by MCAST, has successfully launched aboard the International Space Station (ISS) as part of the SpaceX CRS-31 mission on November 5th, 2024.

The project, led by aerospace engineer and pianist Dr. Leonardo Barilaro, investigates cold welding as a potential solution for repairing spacecraft hulls damaged by hypervelocity impacts from space debris.

ASTROBEAT aims to utilize the unique microgravity environment of the ISS to explore cold-welding applications for emergency hull repairs, targeting a Technology Readiness Level (TRL) of 6. The experiment

seeks to determine if cold welding can effectively seal perforations caused by micrometeoroids and debris from inside the spacecraft, offering a safer alternative to extravehicular activity (EVA) repairs.

In addition to its scientific goals, ASTROBEAT features a cultural initiative known as Space Art, which includes music compositions created by Dr. Barilaro in collaboration with Grammy-nominated cellist Tina Guo and composer Steve Mazzaro.

The project is supported by a consortium of academic and industry partners, including South East Technological University (SETU) in Ireland and New York University Abu Dhabi's Center for Astrophysics and Space Science. As ASTROBEAT progresses, it not only aims to advance space repair techniques but also holds potential implications for cold-welding applications on Earth. The project has been recognized as one of five key experiments promoted by the ISS National Lab's public outreach efforts.





# **CHINESE DELEGATION VISIT** STRENGTHENS EDUCATIONAL PARTNERSHIP BETWEEN MCAST AND JIANGSU **VOCATIONAL COLLEGE OF** MEDICINE

The Malta College of Arts, Science and Technology (MCAST) welcomed a Ministerial delegation from China on December 16th, 2024, marking a significant milestone in its expanding partnership with Jiangsu Vocational College of Medicine (JSMC).

The Chinese delegation, led by the Hon. Vice Minister for Education Wu Yan, was received at MCAST's Main Campus by the Permanent Secretary for Education, Mr Matthew Vella and the College Principal and CEO. Mr Stephen Vella. Additionally, MCAST welcomed a delegation from Jiangsu Vocational College of Medicine (JSMC) whose attendance marked their second visit to the campus. JSMC President Yin Zhongyong joined in welcoming the Hon. Vice Minister, reinforcing the shared vision for international collaboration.

A key highlight of the event was the official recognition of the Zheng He Traditional Chinese Medicine (TCM) Education Centre at MCAST, which has now been elevated to The Zheng He Institute. Inaugurated in 2023, the Centre has provided opportunities for students to engage with Traditional Chinese Medicine.

During the visit, two agreements were signed, marking a new chapter in the collaboration between the institutions. The first agreement will help the development of an MCAST Centre within the Jiangsu Vocational College of Medicine campus in China—the first of its kind. The new Centre will serve as a hub for collaboration, enabling MCAST to share its expertise and educational model internationally, particularly in health and applied sciences.

The second agreement brings together MCAST, JSMC, and the Mediterranean Regional Centre for Traditional Chinese Medicine with a shared commitment to further enhancing the work of The Zheng He Institute. This tripartite collaboration will allow MCAST to expand its educational offerings, strengthen its TCM services, and facilitate innovative research and programme development across both countries.



# MCAST PARTICIPATION IN THE CERN PROJECT AS AN ASSOCIATE MEMBER INSTITUTION

MCAST is now participating in the Large Ion Collider Experiment (ALICE) at the prestigious European Organisation for Nuclear Research (CERN). Following MCAST's acceptance as an associate academic member institution in March 2024, academics from the College's Institute of Engineering and Transport (IET) are now actively contributing to advancements in engineering and physics. Dr Ing. Stephen Sammut, Director of the Institute of Engineering and Transport, and Dr Francis Delicata. Senior Research Officer at ARIC and Deputy Team Leader, led a visit to CERN from 9th to 11th December 2024.

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ALICE, which stands for 'A Large Ion Collider Experiment,' is a leading scientific endeavour conducted at CERN's Large Hadron Collider (LHC). The experiment is focused on investigating the properties of quark-gluon plasma, a primordial state of matter thought to have existed shortly after the Big Bang. By colliding heavy ions, such as lead nuclei, at near-light speeds, ALICE recreates conditions similar to those of the early universe. This facilitates a deeper understanding of the fundamental forces of nature and the strong nuclear interactions binding quarks and gluons.

The ALICE detector is a highly sophisticated instrument situated 56 metres underground near the French village of St. Genis-Pouilly. It plays a pivotal role in these groundbreaking experiments. As part of this collaboration, MCAST's team is contributing significantly to various domains, including artificial intelligence, finite element modelling, computational fluid dynamics, machine learning, materials science, electronics, and automation. Their expertise is being applied to the operation of existing systems, such as the High Momentum Particle Identification Detector (HMPID), and to the research and development of future cutting-edge technologies required for nextgeneration detectors and experiments.

# MCAST AND WIAM **MOU SIGNING**

MCAST and Women in Aviation Malta (WiAM) signed a Memorandum of Understanding on 23rd January 2025. The aim of this partnership is to inspire and support more young women to pursue careers in aviation, addressing the gender imbalance and unlocking untapped potential in this exciting field.

MCAST's expertise in vocational education combined with WiAM's strong industry network will create opportunities for female students. From outreach programmes to mentorship initiatives and industry exposure, together MCAST and WiAM are building pathways for success while fostering a more inclusive aviation sector. The College has been working with various industry partners to promote careers in aviation.

# MCAST HOSTS CURAÇAO DELEGATION ON CAMPUS

MCAST welcomed a delegation from Curaçao led by the Minister of Education, Science, Culture, and Sports, Sithree van Heydoorn, on 21st January 2025. Principal and CEO Stephen Vella, accompanied by Deputy Principal Dr Mario Cardona, Director of the Institute of Engineering and Transport Dr Ing. Stephen Sammut and Deputy Director Eugenio Busuttil, welcomed the Curaçao delegation.

The visit also marked the signing of a Memorandum of Understanding (MoU) with the Government of Curaçao. This agreement strengthens MCAST's role as a provider of quality maritime education and establishes pathways for Curaçao students to join maritime courses at MCAST's Institute of Engineering and Transport.

The partnership will also offer students sea placements and practical training, a crucial aspect that ensures the students are well-prepared to meet the industry needs. During their visit, the delegation also toured the Maritime Centre at the Paola Campus, witnessing the practical training facilities first hand.

MCAST looks forward to welcoming students from Curação and continuing its mission to provide quality vocational education and training.





# NEW MCAST STUDENT COUNCIL ANNOUNCED FOLLOWING ELECTIONS

MCAST announced the new Student Council members (KSM) following the student elections held in December 2024. The Council will represent the student body throughout 2025, focusing on fostering inclusivity, supporting student wellbeing and enhancing campus life.

The elections took place on 10th December 2024, with results announced the following day. The newly elected council is as follows:

- Matthew Sant President
- Giulia Cassar Vice-President
- Yansen Cassar Secretary General
- Matthew Camilleri and Afeez Oladipupo Abdulahi
   Treasurer, International Student Support and Education Department
- Enrique Vella and Nicolo Tanti Sports and Recreational and Environmental Department
- Emma Xuereb and Shaun James Mamo Student Well-being and Inclusion Department
- Glan Said and Loana Fenech Gozo Representative, Foreign Affairs and Apprenticeships Department
- Joseph Agius and Nathan Muscat Events Coordinator and Public Relations Department.

As part of their efforts to engage students and foster participation, the Council has also launched a new logo, symbolising unity, progress and the vibrant student community at MCAST. The logo forms part of the Council's wider vision to encourage more students to get involved in campus activities and have their voices heard.

The Council will work collaboratively with the MCAST administration and various stakeholders, addressing students' concerns while launching initiatives to improve campus life. Areas of focus include international student support, environmental projects, sports and recreational activities and student well-being.



## **MCAST STUDENTS' SUCCESS AT ENGINEERING AWARDS**

The 23rd edition of the Malta Engineering Excellence Awards (MEEA) took place on 29th November 2024 at Verdala Palace, the official summer residence of the President of Malta. This year's event, held under the patronage of Her Excellency Myriam Spiteri Debono. President of Malta, was co-organised with The Energy and Water Agency and sponsored by APC, Schneider Electric, ESS and Elektra. The ceremony reflects the growing recognition and appreciation for outstanding engineering achievements in Malta including those by the MCAST engineering community.

The evening began with the presentation of the Best Final Year Project Awards 2024, sponsored by Bank of Valletta. These awards celebrated exceptional engineering projects by fresh graduates from MCAST and the University of Malta.

Representing MCAST, nominees included Aleksander Tancic for the Electrical and Electronic Engineering stream, together with Nicole Bugeja, Glenn Schembri and Nicholas Vella for the Mechanical Engineering stream. The winners were Aleksander Tancic and Glenn Schembri, whose projects earned them well-deserved recognition.



## MCAST IS A PARTNER IN **COVERE2 PROJECT**

MCAST is proud to be a partner in the groundbreaking COVERE2 Project, an initiative designed to transform greenhouse gas (GHG) emissions management within the agri-food production sector. COVERE2—standing for 'Collecting, Verifying, Reporting, and Reducing Greenhouse Gas Emissions'—seeks to bridge the gap between rising sustainability demands and the challenges faced by agricultural companies in reaching net-zero targets.

At MCAST, our role within the COVERE2 Project is to conduct market research to evaluate the potential for GHG emissions accounting, verification, and reduction in the European dairy industry. This research will provide valuable insights to guide the development and implementation of effective solutions.

COVERE2 is a collaborative project that brings together esteemed partners from across Europe, namely the University of Helsinki (Finland), ELEKS (Estonia), MCAST (Malta), and Vitagora (France). COVERE2 is funded by the European Institute for Innovation and Technology (EIT Food), a body of the European Union.

## **ENHANCING DISSERTATION SUPERVISION WITH AI: A STAR** PROJECT DEMONSTRATION

The STAR project, financed by Xjenza Malta through the FUSION: R&I Research Excellence Programme, has successfully concluded, bringing new opportunities for students working on their final-year dissertations. The STAR prototype was presented to MCAST staff and students during an event held on 25th February 2025 at the MCAST's Applied Research and Innovation Centre.

The MCAST research team, led by the MCAST Director of Information Systems Mr Gerard Said Pullicino. developed an Al-powered tool that helps students gather and organise research materials more efficiently. Students can use this smart system to automatically compile relevant information into a digital research scrapbook. By adapting to different learning styles, the tool makes it easier for students to connect research findings to their dissertation topics. During the event, the research team shared an experiment that was carried out using AI to assist students to develop a viable research proposal, and encourage attendees to interact with the developed chatbot to explore solutions to different use cases.

The impact of the STAR project extends beyond the support given to students—it also helps their supervisors and the wider academic community. The system can suggest alternative learning resources, such as online webinars, making research more accessible to everyone. For supervisors, this AI tool provides insights into the materials students are using, helping them offer better guidance.

The STAR project further advances artificial intelligence research, demonstrating how AI can be used to support academic work and ensuring that students and educators have smarter tools to support their academic journey. The successful implementation of the application paves the way for further Aldriven innovations in academic research, fostering collaboration between educators and AI specialists to enhance learning experiences.



# AUSTRALIAN HIGH COMMISSIONER VISITS MCAST TO EXPLORE COLLABORATIVE OPPORTUNITIES

MCAST Principal and CEO, Mr Stephen Vella, recently welcomed the Australian High Commissioner to Malta, Matt Skelly, for an introductory meeting at the College. The visit marked an important step in fostering potential collaboration between Malta and Australia in the fields of education, skills development, and workforce training.

During the meeting, High Commissioner Skelly highlighted the shared workforce challenges faced by both countries, emphasising the importance of addressing emerging career trends and skills gaps. Discussions focused on identifying areas where MCAST and Australian institutions could collaborate to develop innovative training programmes tailored to the needs of evolving industries. High Commissioner Skelly also proposed establishing connections between MCAST and Australian organisations specialising in maritime and logistics—two sectors of strategic importance for both nations. This initiative aims to leverage expertise and resources to enhance educational opportunities and workforce readiness in these critical industries.

This meeting underscores MCAST's dedication to fostering international relationships that support its mission of equipping students with the skills needed for success in a rapidly changing world. The meeting was held on 4th February 2025.



# MCAST HONOURS RETIRING STAFF MEMBERS IN RECOGNITION EVENT

MCAST celebrated the contributions of six staff members who retired between January and mid-November 2024, recognising their years of dedication in a retirement gathering. The event served as a tribute to the time and effort these employees have devoted to supporting the College's educational mission, its students, and the wider community. The group of retirees collectively contributed 96 years of service to the College.

Hosted by the President of the Board of Governors, Mr Horace Laudi, and Principal and CEO, Mr Stephen Vella, the ceremony saw each retiree, namely Edward Bugeja, Mario Bugeja, May Callus, Josephine Mifsud, Adrian Rizzo and Anna Maria Vella presented with a certificate and a token of appreciation for their service. The event was a moment of appreciation and reflection, celebrating those who have dedicated their careers to MCAST and its community.



# STUDENTS SHOWCASE CREATIVITY AT GLOBAL GAMES JAM 2025

MCAST's Institute of Information and Communication Technology (IICT) hosted the Global Games Jam 2025 last weekend, welcoming 40 participants for a 48-hour game development marathon. The event, held at the MCAST Resource Centre (MRC), brought together students, alumni, and members of the general public for an unforgettable experience of creativity and collaboration. The games jam was organised by ODIN Malta and supported by Playcon and Stargate Studios.

The event began with keynote speeches delivered by Principal and CEO Stephen Vella and Luke Ambrogio from ODIN Malta, setting the tone for the weekend. This was followed by workshops led by industry experts and the much-anticipated theme reveal. Participants concentrated on the world of game design, with support provided throughout the event.

Among the 40 participants were students from MCAST's Institute for the Creative Arts (ICA) and the Institute of Information and Communication Technology (IICT). Notably, 25 participants are currently enrolled in MCAST's newly launched Digital Games Development and Creative Computing degrees, showcasing the institution's growing focus on this field.

For over 48 hours, participants worked to create, develop, and polish their games, culminating in a judging session on Sunday. Judges from leading game companies evaluated the games and commended the participants for their creativity, high standards, and technical polish. The expert panels included John Chasoulidis (Hasoo), Mark Andrew Azzopardi (Narc), William Calleja (Narc), Dan Ghizta (Zarzilla), and Daniel Poludyonny (Wild Fields).

The Award Winners include First-place Winners – Nicole Frendo, Naomi Sammut, Jake Brinca, Luca Spagnol, and Favian Karl Debono; People's Choice Award and Second Place Winners – Josef Carl Muscat, Adam Darmanin and Isaac Bonello.

MCAST is proud of the talent displayed by all participants and extends its gratitude to the industry partners, judges, and organisers who made this event possible. The Global Games Jam continues to highlight MCAST's commitment to nurturing future leaders in the gaming industry and fostering innovation in digital game development.







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