

Features and attributes for virtual studies	Level 1	Level 2	Level 3	Level 4	Level 5
General organizational approach	Ad hoc, based on classical class-based learning	Virtual learning is introduced as a separate type(-s) of service Specific responsible person(-s) and/or departments/teams are assigned	The specific department(-s) is(are) assigned Policies and Procedures are elaborated Quality metrics are assigned Measurements are performed Improvements are followed	All features from Level 3 are implemented. Additionally: Internal improvement sessions Internal audits External audits and/or certification programs	Continuous improvement procedures are applied
Accreditation maturity	Virtual learning elements are applied occasionally, no intentions for specific accreditation procedures	Virtual learning is accredited as a part of common teaching activities. Separate virtual activities (course, lab delivery, or consulting services, etc.) are distinguished in the formal accreditation programs and syllabi	Virtual education modules are accredited as a separate dedicated learning modules	As for level 3 Additionally: Development of internal best practices models Internal audits	As for level 4 Additionally: Participating in certification and audit companies/organizations activities
Teaching methodology	No specific methodology for virtual education process. Attempts to apply campus based methods as is	Defined and agreed preferable methodology for online and/or virtual classes exists Best practices are extracted and discussed AI tools are sporadic	Methodology types are defined and approved in accordance to educational organization goals Main processes are performed under approved policies and are repeatable, stable and resilient Internal requirements exist Dedicated syllabi for online courses Specific requirements for different types of virtual studies Best practices exist and actively shared Applying AI is under corporate policies for both teachers and students	Methodology is aligned to strategic goals: - Students' satisfaction - Employers' satisfaction with graduates - Level of knowledge in the subject area - Educational organization rating and brand recognition - Professor and staff satisfaction (eNPS) - Attracting better candidates - Methodology is flexible to adapt to changes of VUCA world - The teaching methodology is adapted for students' mental health - Methodology can be adapted to innovative technical and software tools such as AI, VR, AR, Metaverses, but not limited to	Methodology is aligned to strategic goals: - Students' satisfaction - Employers' satisfaction with graduates - Level of knowledge in the subject area - Educational organization rating and brand recognition - Professor and staff satisfaction (eNPS) - Attracting better candidates Methodology is flexible to adapt to changes of VUCA world Continuous improvement
Training materials	Existing for campus training or ad hoc prepared	Main learning materials are moved to e-format. Main requirements to e-materials, including video are defined Clear accessibility of study materials for students	Instructor templates (presentations, labs, images) are prepared and delivered Video recording system is defined, tested. Training materials are developed manually or based on partially automated systems. Training materials - including multimedia - are adapted for limited and low speed Internet access Delivery is fully or partially automated Brand images, slide templates, background images and effects are delivered to instructors Teacher's preparation roadmap exists Instructor's training sessions established and recorded Teachers are provided with clear instructions and support Pre-class trainings on methodology and tools for teachers are introduced Trainer's inspections and audits are regular Ability to apply antiplagiarism tools Teachers/professors are familiar with common AI assistants and can apply them within corporate policies.	Teachers/professors react to students' inquiries in appropriate time, which is aligned with education tempo, tasks and audience Example: BBA and MBA, or Uni and Professional training center Video recordings are available in common formats with alignment to ED's and students' Internet bandwidth For Live and Hybrid students live teams are formed in VLE to work together Labs, Assignments, practical works are closely linked to current best practices in the subject area Training materials are mostly interactive and involving Training materials are adapted for students and staff with limited capabilities (vision, hearing, etc.) Ability to embrace AI tools and oppose cheating with AI tools	All features and attributes of Level 4 AND Instant search for new approach Integrating innovative methodological and technical facilities Fail fast approach is welcome Continuously updated, improved and adapted policies of advanced tools implementation such as AI assistants and agents
Teachers/professors' e-teaching competences	Teaching competencies are mostly class/campus based	Teachers - innovators share their experience, mostly informally Best practices are shared Experiments continue Special requirements for e-teachers appear			
Communication methods	Ad hoc, irregular, changing spontaneously	Communication points are defined Practices are mostly inherited from class/campus-based approach P2P and team communications exist, but can be sporadic	Omnichannel structured communication system, including synchronous, asynchronous methods; push/pull; team, p2p, one-to-many. Notification systems for all participants and roles; Teachers' and students' are ensured with communication trainings AI based systems are piloting or apply sporadically	As for level 3. Students and teachers can choose the best convenient for them Teachers try implementing virtual communications using some of the innovative technologies, i.e. VR/AR or virtual classes, or metaverse classes, etc. for better in-person involvement	All features and attributes of Level 4 AND Instant search for new approach Integrating innovative technical facilities Applying fail fast approach Continuous search and implementation of new communication methods and tools to improve and fasten collaboration
Communication tools	are chosen occasionally; often free or open source not aligned to the specific goals, students' and teachers' convenience	Preferred or recommended tools are defined. There is still no organization-based standards	Video (synchronous & asynchronous) meetings Audio/podcasts asynchronous communications Forums, chats Feedback system Internal social nets		
Students' involvement	Spontaneous, attempts "doing business as usual" in class.	P2P communications with a teacher and Team communications exist, often sporadic. Control and grading are e-based, but practices are mostly inherited from class/campus-based approach. Feedback is gathered on a regular basis	Structured balanced communications, including: P2P Push (Teacher-to-a student and Student-to-Student, Student-to-Teacher) Team Live online meetings Collaboration systems for team work, labs and practical activities	Deep students' involvement in collaboration with teachers and between students, and with industry Students are motivated to participate actively in discussions, teamwork, sharing knowledge and experience Schedule of assignments, labs, homework is balanced across courses to prevent overlap in topics and time	All features as for L4. Metaverse options for virtual presence, collaboration are implemented. New features and tools are actively tested and their implementation is supported continuously Students are empowered to seek for innovative tools, introduce them, use actively and share with others
Technical facilities	No common standards. Each teacher implements those tools, which she or he knows and uses in daily life. Grading procedures are manual	Some basic LMS exists. Often there is a combination of several technical tools Support is "on demand" Grading is partially built in LMS, partially manual Live sessions/streams appear Labs are partially delivered online Plagiarism and AI content generation policies do not exist	Video recording system Live video system Video streaming Learning management system Feedback collecting and analysis E-materials storage Grading system	As for level 3. Mobile access covers all features AI based bots are implemented for support purposes Continuous improvement activities Active research for new features and opportunities Embracing AI implementation vs opposing AI cheating is clearly differentiated	All features as for L4. AI, AR, VR, Metaverses, gaming, etc. are actively introduced into classes and practices, and support facilities Instant search for innovations, fail fast approach
Administrative staff readiness	Low, ad hoc. Reporting is manual. No or low support for students and teachers	Dedicated staff - both administrative and technical - appears Technical support is "on demand" but by a dedicated group Best practices are consolidated based on feedback loop	KPIs are introduced Metrics are continuously checked across KPIs Administrative departments (dean's/academic office; sales; technical; marketing; legal dept) activities are coordinated and mostly automated. Administrative staff delivers 360 grade support to students and teachers - from methodology to technical facilities. Claim procedures are strictly followed by (including AI generated content)	Monitoring of the environment and internal achievements for new opportunities on a regular basis. Updating KPIs to changing goals Actively involve all participants - students, teachers, technical staff, alumni Search for new methods and best practices and tools Proactively updates internal rules and procedures according to technological challenges Plagiarism/AI generation detecting systems	All features from Level 4 and Create new study tracks to attract alumni Actively motivate technical, teaching staff for innovations Work on continuous procedure, staff improvements Form and participate in professional, business area communities
Transparent marketing	No specific marketing activities for online programs	Marketing dedicates a separate channel for research and promote online/virtual studies	Students and candidates are provided with clear transparent information about virtual learning facilities Website, social nets contain separate sections on virtual learning	Marketing activities are multi-channel oriented: Students Persona portrait for typical virtual students are designed Future employers Professors and teachers Guest speakers Alumni Marketing activities are focused on brand recognition and improvement All parties are actively involved into social net communications	All features of Level 4 AND Instant search for new approaches Marketing and promotion in virtual reality, metaverses