



higher education
& training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA



westcol
Western College for Technical, Vocational Education and Training

TERMS OF REFERENCE

PROVISION OF A LEARNER MANAGEMENT SYSTEM (LMS) FOR THREE (3) YEARS

TECHNICAL SPECIFICATIONS

Access Specifications

- **Website:** Personalised website for Western TVET College, on which learners can access the online learning platform of the institution.
- **Zero Data Cost:** Zero-rated learning platform where college staff (students, administrators, lecturers, Senior lecturers and HOD) do not incur data costs to teach, learn and interact online.

Application Tools Specifications

- Data free application portal accessible from anywhere.
- Automated student transcript analysis using deep learning (no human intervention to analyse results).
- Automated screening and student acceptance (no human intervention to screen and accept students).
- Automated verification of Matric certificate legitimacy (Matric results are automatically verified against Umalusi's database).
- Administrator dashboard with descriptive reports and analytics.

Registration Tools Specifications

- Data free online registration portal (students can register from anywhere, at any time).
- Lecturer and administrator dashboard with descriptive, predictive, and prescriptive reports and analytics.
- Automated setup of classes, students are allocated automatically by the platform (no need for human intervention).
- Resource planning recommendation engine automatically suggests lesson plans to ensure all course material is covered.
- Student inventory management system that keeps track of resources allocated to students.
- Capture student card photo

Orientation Tools Specifications

- 100% online orientation (no human resources or facilities required to orientate students).
- Administrator dashboard with descriptive reports on student performance and results.

Learning Tools Specifications

- Real-time automated support, which includes prescriptive recommendations using deep learning of having electronic book.
- Lecturer dashboard with descriptive, predictive and prescriptive reports that automatically assess the student's academic strengths and problem areas and offers solutions through deep learning.
- Automated communication tools that use email and SMS to ensure that all communications are delivered.
- Accredited course content that is optimised for online learning.
- Automated compliance reports to assist lecturers in producing DHET compliant portfolios of assessment.
- Device connectivity program that empowers students and lecturers for online learning by providing them with the required infrastructure and technical devices.
- Mobile app for offline learning and data free academic, admin and technical support.
- Gamified platform that incentivises /rewards students for completing course material.
- Adaptive programs for all users to ensure full platform and program adoption.
- Brand equity program that focuses on uplifting the college's brand.

Engagement Tools Specifications

- **Audio calls to mobile phone:** Lecturers can dial students' cell phones from the platform and access the recording of the call after.
- **Video calls/ Live class:** Video calls from the lecturer to students, with ability to conduct group video calls and live online classes.

- **Live chat:** Live chat where students and lecturers can exchange instant messages, just like they would on modern social media platforms.
- **Inbox:** Inbox in which students can exchange messages with their classmates, lecturers, support (SSS functionality) and coaches.
- **Newsfeed and forums:** Shared Newsfeed and forums where students can engage in conversations and share content, multimedia files, articles, etc. with their classmates, their lecturers and students who are studying the same subjects across all Western TVET College campuses'.
- **Resource-based conversations:** Comment functionalities for each study resource where students can have conversations with each other and their lecturers on specific content such as videos, textbook pages, slides, questions, etc.
- **Assignment and project forums:** Commenting and multimedia-sharing tools, that allow lecturers and students to have conversations on a specific assignment/project and share resources.

Assessment Tools Specifications

The Platform can perform the following tasks related to the assessment of students:

- Data free online assessment functionality with Artificial Intelligence (AI) proctoring that monitors the student's device, behaviour and environment to ensure exam integrity.
- Lecturer dashboard with descriptive, predictive, and prescriptive reports and analytics that provide insight into current and future student performance.
- Automated marking and grading, using machine learning for all online assessments excluding essay questions.
- Online submission and marking of assignments and projects.
- Marking and uploading students' tests and examination documents.
- Automated calculation and reporting of students' progress marks across all assessments including examinations, practical sessions and tests.
- Reporting on students' performance per assessment, including analysis of their performance for each outcome in practical sessions, internal examinations (in line with DHET prescripts) or tests, as well as group performance analysis of marks and outcomes.
- Functionality to suggest additional learning resources based on students' performance and progress.

Monitoring Tools Specifications

Heads of Department and other authorised personnel can monitor the performance and activities of lecturers including:

- Tracking their productivity by analysing the days and times they are most active, and the activities they do when they are most active.
- Accessing dashboards that offer reports on which students have not been attended to by the lecturer, how many follows, help requests, and call requests are pending or have been completed.
- Viewing assignments, projects, tests, practical sessions, and examinations the lecturers will still need to mark, and how many have already been marked. The dashboard also performs analysis to flag work that has not been marked within the specified deadline.
- Viewing the study plan of the lecturer that details when a module is going to be covered and which modules have already been covered.
- Heads of Departments, Campus Managers and other authorised staff can also monitor student activities by:
 - viewing how many students have been flagged by the system as 'risky' students. These are students who are at risk of failing the semester, based on their study behaviour.
 - Listening to and reading conversations between lecturers and students; and random intervals.
 - Viewing how many students have written assessments but have not received marks.
 - Functionality to automatically mark attendance of students with pop-up notifications at random intervals.

Support Tools Specifications

The Platform should perform the following Academic Support tasks:

- **Help Requests:** Students can ask for help whenever they do not understand a specific content such as a video, specific page, slides, etc. and the help request instantly appears on the dashboard of the lecturer and notifies them.
- When lecturers take too long to respond, the help request automatically gets escalated to the Senior lecturer and HOD for intervention.
- **Follow-ups:** Follow-ups are automatically triggered and displayed on the lecturer's dashboard when students exhibit irregular study behaviour including, but not limited to; dropping out when studying a specific content, missing attendance of online lectures, failing to complete modules within allocated timeframe; attempting to study same content multiple times unsuccessfully, not understanding and skipping specific content, etc.
- **Call Requests:** Call requests are automatically scheduled with the lecturer when students request for a call on their portal. A call link is automatically created, and lecturers can dial students directly on their mobiles from the platform.
- **On Demand Support:** Students are able to request immediate support from their student success coaches at anytime via the platforms video call functionality.

Content Specification

The platform should provide online course content, including an automated learning guide, robot advisors, learning activities or exercises, step-by-step solutions, an explanation/illustration of concepts, slides and videos, interactive course content, including content from accredited publishers, lecturers and subject matter experts, which includes digital versions of books, notes, videos, and online assessments in a digital format.

Placement Specifications

The online learning platform should be equipped with work placement functionalities that can be used to match the skills students have acquired while they were learning, with the employers' skills requirements. This functionality enables institutions to link existing students to potential employers, and track how many students have been placed.

Scheduling Tools Specifications

Online event tools enable lecturers, Senior lecturers, HODs and Campus Managers to:

- Schedule examinations, practical sessions, and tests.
- Link each examination, practical sessions and tests to outcomes that are going to be covered.
- Monitor which students are ready for the examinations, practical sessions, and tests.
- Monitor which students have confirmed they will attend the assessment.

The scheduling functionality includes automated notifications to students' emails and cell phones.

Specific Requirements

- Interaction with college Business Management System (BMS) (Coltech).
- Security Feature (copyright prescripts, cybersecurity and POPI act)

MANDATORY

Appendix Number	Description of Appendix	Requirement	Circle yes if submitted	
Appendix A	RFP Document	Each page of the RFP document to be initialled by a delegated representative	Yes	No
Appendix A1	Proof of Payment	Attach Payfast proof of payment and include the company tendering for, if purchased by a different company	Yes	No
Appendix B	Technical specifications and pricing	Attach your pricing schedule as per specifications. Pricing schedule to also be saved in excel format.	Yes	No
Appendix B1	USB X 1/No CD accepted	Fully scanned tender document and all returnable. Pricing schedule to also be saved in excel format.	Yes	No
Appendix C	Proof of Bank Account	Provide Confirmation letter from Bank not older than 3 months	Yes	No
Appendix D	Company registration documents	Provide Company registration documents	Yes	No
Appendix E	ID Copies of directors	Certified & not older than 3 months	Yes	No
Appendix F	Tax Pin	An original valid Tax Pin	Yes	No
Appendix G	Audited Financial Statements/Management Account	Provide Audited Financial statements or Management accounts for the last 2 Years	Yes	No
Appendix H	B-BBEE certification	Provide a valid B-BBEE certificate from a SANAS accredited agency or Auditor registered with the IRBA	Yes	No
Appendix I	Declaration of Interest	Complete Point 9 of this tender document	Yes	No
Appendix J	Registration On Central Supplier Data Base (CSD)	Provide a copy of the full report of registration on National Treasury Central Supplier Database	Yes	No

FUNCTIONAL CRITERIA

Threshold 70

Item No.	EVALUATION CRITERIA	Points allocated to item
1	<p>Experience, Skills and Ability of Service Provider to fulfil Westcol's requirements, past experience in work of similar nature.</p> <p>The service provider must have at least 5 years' experience of providing electronic Learner Management System (LMS) to higher educational institutions. Provide verifiable written references:</p> <ul style="list-style-type: none"> • 3 written verifiable references = 40 • 2 written verifiable reference = 20 • 1 written verifiable reference = 10 <p>Must have knowledge of the higher education and training environment and must have been involved in the servicing of such institutions relating to the supply and maintenance of LMS.</p>	40
2	<p>Methodology and approach/ Work plan</p> <p>The bidder will be required to provide a detailed description of the system offered. The needs analysis system <u>under the scope of work /specification list</u> will be used for this evaluation.</p> <p>Guidelines</p> <ul style="list-style-type: none"> • Application Tools Specifications = 5,8 • Registration Tools Specifications = 5,8 • Orientation Tools Specifications =5,8 • Learning Tools Specifications = 5,8 • Engagement Tools Specifications = 5,8 • Assessment Tools Specifications =5,8 • Specific requirements =5,8 • Access specification =5,8 • Monitoring =5,8 <p>Scores to be rounded to the nearest.</p>	52
3	Provide portfolio of evidence for LMS done at one higher education institution (on USB or hard copy)	8
	TOTAL	100

PRICE SCHEDULE

Firm and valid for thirty-six (36) months

Item	Requirements	Total Price for 3 Years (including VAT)
1	Application Tools Specifications	R
2	Registration Tools Specifications	R
3	Orientation Tools Specifications	R
4	Learning Tools Specifications	R
5	Engagement Tools Specifications	R
6	Assessment Tools Specifications	R
7	Specific requirements	R
8	Access specification	R
9	Monitoring	R
10	BID PRICE FOR 36 MONTHS (INCL. VAT)	R