



INFORMATION BRIEF

Universal Cognitive Aptitude Test (UCAT)



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A proven predictor of job success.

A person's cognitive aptitude is a powerful predictor of their future work performance and how suitable they are for the job.

Cognitive aptitude – often referred to as general intelligence or “g,” refers to the ability to solve problems, digest and apply information, learn new skills, and think critically. As a language-independent test, the UCAT does not test verbal ability, making it easily translatable and ideal for international use.

MEASURES

- Critical thinking
- Problem-solving skills
- Learning ability
- Ability to digest and apply new information



PREDICTS

Predict how well someone will acquire, organize, retain and apply information on the job



QUESTIONS

Candidates complete up to 40 questions



TIME

The UCAT is timed and takes 20 minutes to complete



Why is cognitive aptitude so important?

People who score well on cognitive aptitude tests use their high-level information processing skills to solve job-related problems more effectively, and to learn on the job more quickly. As a result, people with strong scores tend to perform better on the job and in training.

A strong and long-standing body of research demonstrates that cognitive aptitude is one of the most accurate predictors of job success:

- ✓ 1.6x as predictive as unstructured interviews
- ✓ 4x as predictive as experience.

Research has also shown cognitive aptitude to be valid, reliable and strongly predictive of future work performance. People with high levels of cognitive aptitude can:

- ✓ Perform work tasks more accurately and successfully
- ✓ Make decisions more effectively
- ✓ Use reasoning skills and solve problems
- ✓ Respond intelligently to new or complex circumstances.

Which jobs is the UCAT applicable for?

Cognitive aptitude is a critical underlying factor for almost every job, since all jobs require people to process information, solve problems and learn new information. It's especially important in jobs that require people to process large amounts of information, such as complex technical jobs and managerial roles.

The UCAT provides a traditional approach to assessing cognitive aptitude and is popular with customers assessing for mid- to senior-level roles such as managers, sales executives, software developers, executive assistants and analysts. It's also critical for jobs that involve a great deal of training, such as an apprentice, intern or graduate roles. As a language-independent test of cognitive aptitude, the UCAT is especially applicable for international candidates or roles that require little to no verbal ability.

What abilities does the UCAT measure?

The UCAT assesses four underlying abilities that, together, provide an overall measure of a candidate's cognitive aptitude.

Logic & Analysis

Ability to use logic and reasoning to solve problems and interpret data.

Numerical Reasoning

Ability to reason using numbers and numerical concepts.

Attention to Detail

Ability to focus on detail-oriented tasks with thoroughness and accuracy

Spatial Reasoning

Ability to visualise, make spatial judgements, and problem solve.

What score ranges are available?

The UCAT includes a series of suggested score ranges that help you understand how each candidate's results meet the range that has been associated with successful performance in various roles. These ranges are based on large samples of prior scores from individuals applying for or occupying similar roles and are supported by multiple validation studies.

Score ranges include:

- ✓ Accounting
- ✓ Analyst
- ✓ Architecture and Drafting
- ✓ Art and Design
- ✓ Aviation
- ✓ Business Operations Specialist
- ✓ Cashier
- ✓ Collections
- ✓ Counseling and Social Work
- ✓ Customer Service Manager
- ✓ Customer Service Representative
- ✓ Data Analytics and Statistics
- ✓ Dispatcher
- ✓ Driver
- ✓ Education
- ✓ Emergency and Protective
- ✓ Engineering
- ✓ Farming, Agriculture and Forestry
- ✓ Finance Manager
- ✓ Financial Services
- ✓ Food Preparation and Service
- ✓ Freight and Distribution
- ✓ Front Line Supervision
- ✓ Grounds and Cleaning
- ✓ HR Manager
- ✓ Human Resources
- ✓ IT and Computing Systems
- ✓ IT Manager
- ✓ IT Support
- ✓ Journalism and Communications
- ✓ Legal
- ✓ Machinist / Manufacturing
- ✓ Management
- ✓ Marketing and Product
- ✓ Media Production
- ✓ Medical Assistance
- ✓ Medicine and Healthcare
- ✓ Mining, Oil, and Gas Worker
- ✓ Nursing
- ✓ Office and Administrative Support
- ✓ Paralegal and Legal Support
- ✓ Personal Care and Services
- ✓ Plant Operator
- ✓ Production Manager / Supervisor
- ✓ Production Worker
- ✓ Project Manager
- ✓ Retail Sales
- ✓ Sales / Account Executive
- ✓ Sales Manager
- ✓ Sales Representative
- ✓ Science and Research
- ✓ Senior and Executive Leadership
- ✓ Service Technician
- ✓ Software Development
- ✓ Store Manager
- ✓ Trades and Construction

Can I create my own score ranges?

You can create your own score ranges within the Criteria platform. We can work with you to gather and analyse results from your own organisation (either from incumbents or using data from your applicant pool) to build appropriate score ranges for your roles.

What is the candidate experience like?

Flexible testing on any device

The UCAT is device-agnostic. This means candidates can take the test on any digital device they choose – a mobile phone, tablet, laptop or desktop – in any location and at any time.

Example questions

The UCAT contains 40 items in total, however most candidates won't complete every question within the 20-minute time limit. These questions assess the four areas of logic and analysis, numerical reasoning, attention to detail, and spatial reasoning.

Example logic and analysis question

If Jim is older than Kate, Kate is older than Brian, and Sophie is older than Jim, which of the following must be true?

- A.** Brian is older than Sophie
- B.** Sophie is older than Brian
- C.** Brian and Sophie are the same age

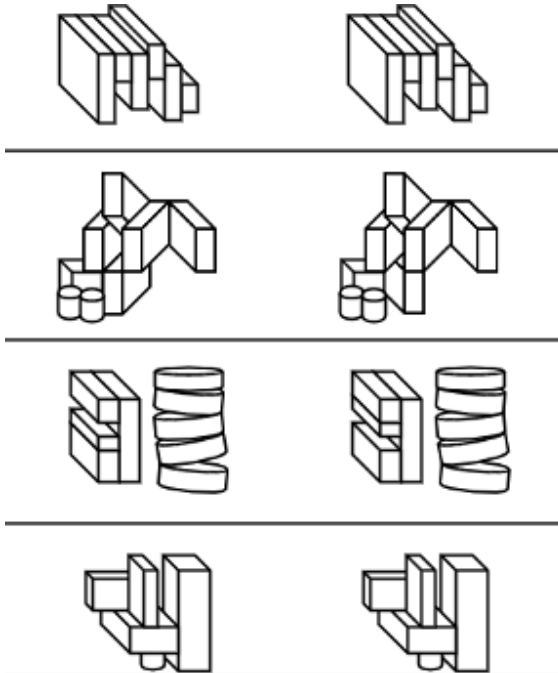
Example numerical reasoning question

A city has a population of 1300. If the city's population grows 30%, what is its new population?

- A.** 1420
- B.** 1510
- C.** 1600
- D.** 1690
- E.** 1780

Example attention to detail question

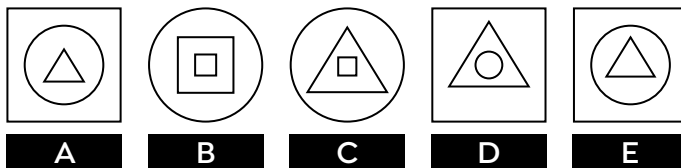
How many of the four pictures in the left hand column are exactly the same as the corresponding picture in the right hand column?



- A. 0
- B. 1
- C. 2
- D. 3
- E. 4

Example spatial reasoning question

Which of the following does not belong?



Ensuring a fair candidate experience

Like all of our assessments, the UCAT can be completed remotely over the internet under unsupervised conditions. This provides a high level of flexibility and convenience for the candidate. We adopt the following best practice strategies to ensure online security and reduce the likelihood of cheating.

Dynamic item bank

To enhance test security, the UCAT is a dynamic assessment that draws on a large item bank of individually optimized test items. This means that no two candidates will ever receive the exact same set of questions, giving you confidence in their individual results.

Secure online assessment

Our online testing engine is delivered using secure web technology, which allows us to ensure that assessment security and integrity is maintained and that assessment time is tracked accurately.

Detailed assessment session logging

From the moment the candidate logs in to start their assessments to the moment they finish, we create detailed test logs of the candidate's testing session, including time spent in the assessment, internet connectivity, and individual issues and actions within each game played. If the candidate indicates that their internet connection dropped out, or that they were disturbed while completing the assessment, assessment logs can be consulted to verify and help to support these claims.



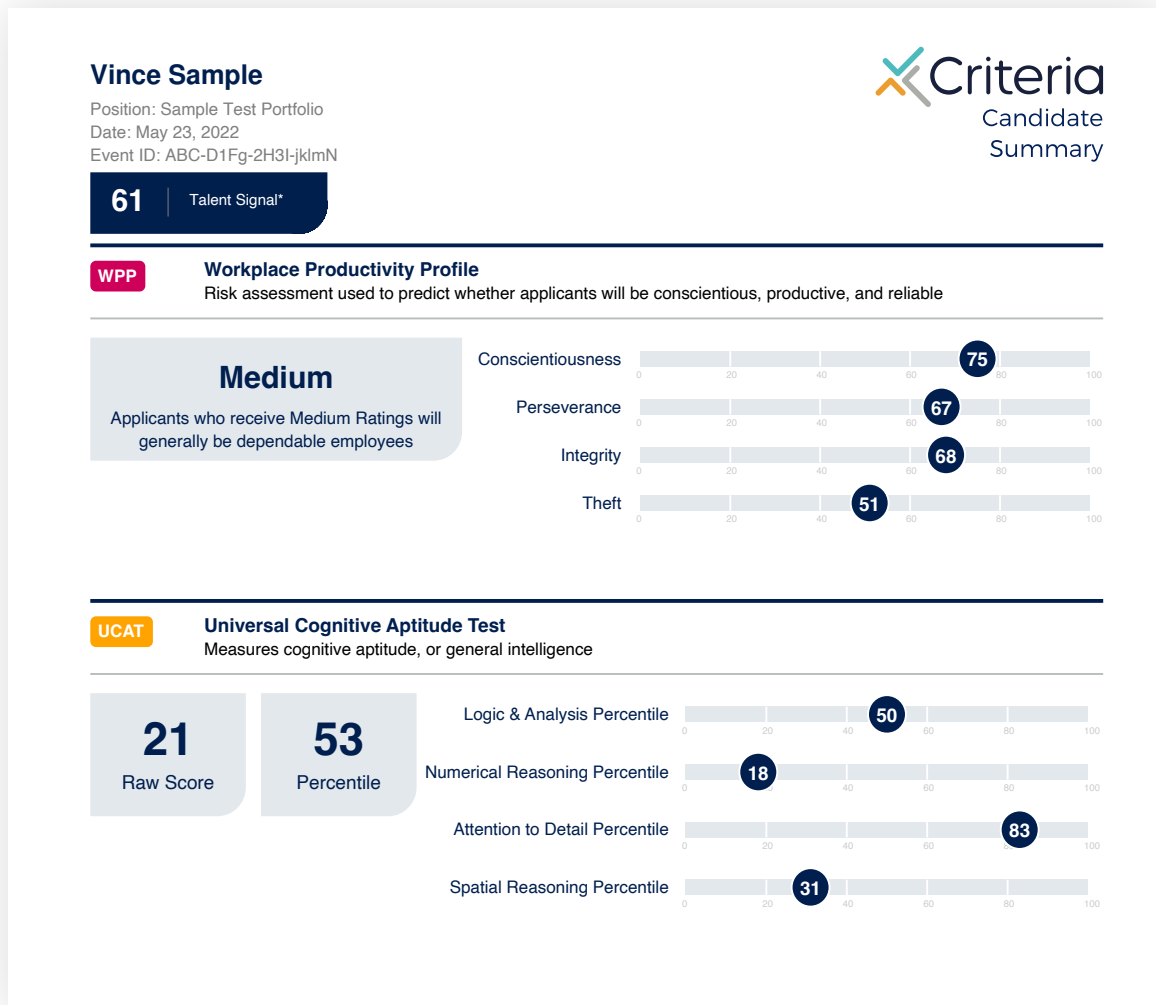
Reporting

After candidates complete testing, you can access two different reports.

- ✓ A **Candidate Summary Report** that provides a high-level overview of a candidate's results on the UCAT and any other Criteria assessments they've completed.
- ✓ A **Candidate Score Report** that provides detailed information of a candidate's scores on the UCAT.

Candidate Summary Report

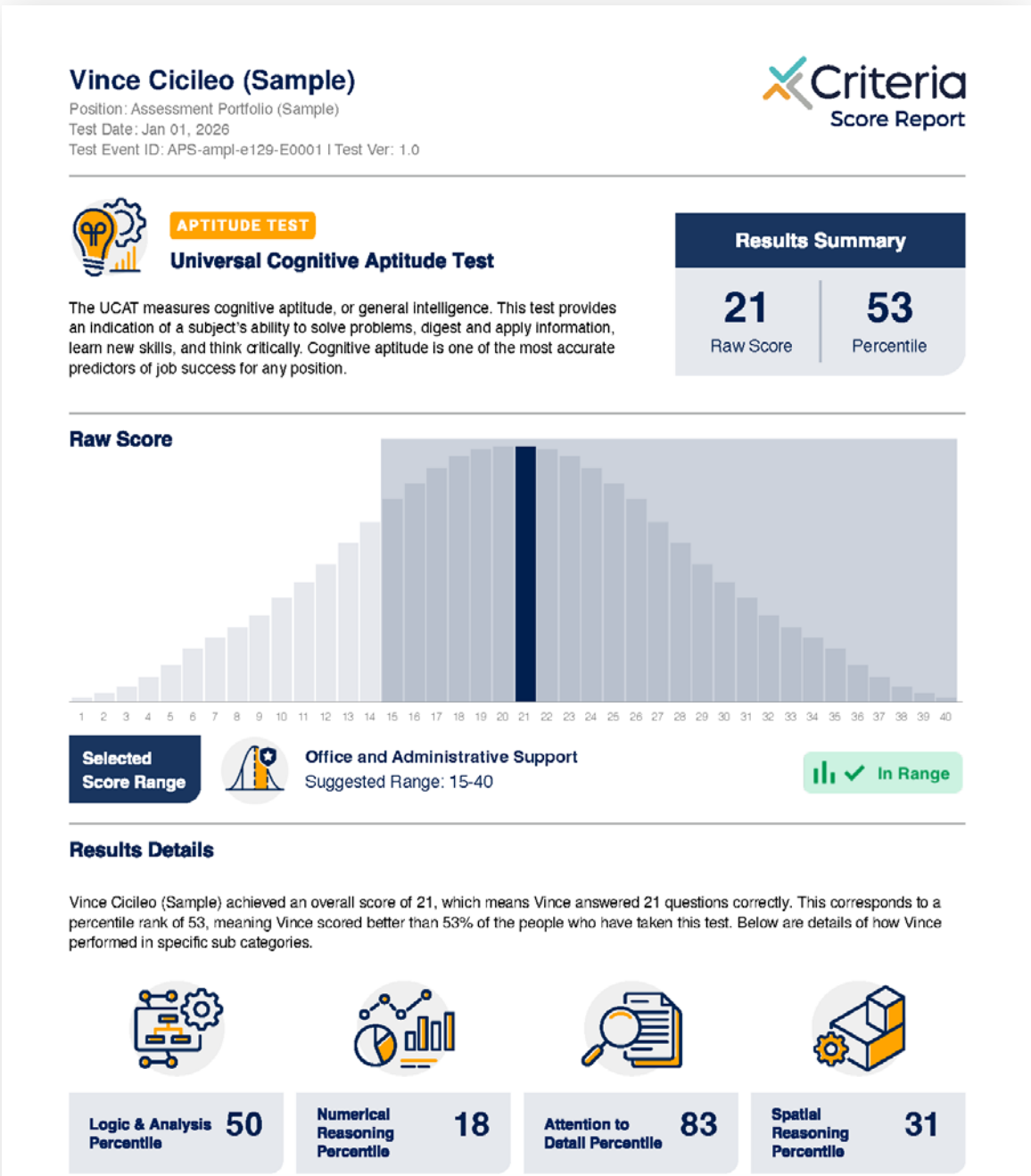
The candidate summary report includes a quick snapshot of a candidate's results for each test they've completed. It also includes their Talent Signal, which is based on a weighted average of their performance across individual tests.



Candidate Score Report

The score report gives you more detailed results for a single candidate. It includes:

- ✓ Candidate information (name, position, date completed)
- ✓ A **Results Summary** displays the candidate's raw score out of 40 and their percentile score.
- ✓ A **Raw Score** graphic showing their raw score on a normal distribution, which indicates how their score compares to other test-takers.
- ✓ If enabled, you'll also see a shaded area in the raw score section that indicates how the candidate's raw score compares to a selected score range. In the example below, the candidate's raw score of 21 falls within the Office and Administrative Support suggested range of 15-40.
- ✓ A **Results Details** section, displaying their percentile scores for each of the four sub-categories measured by the UCAT.

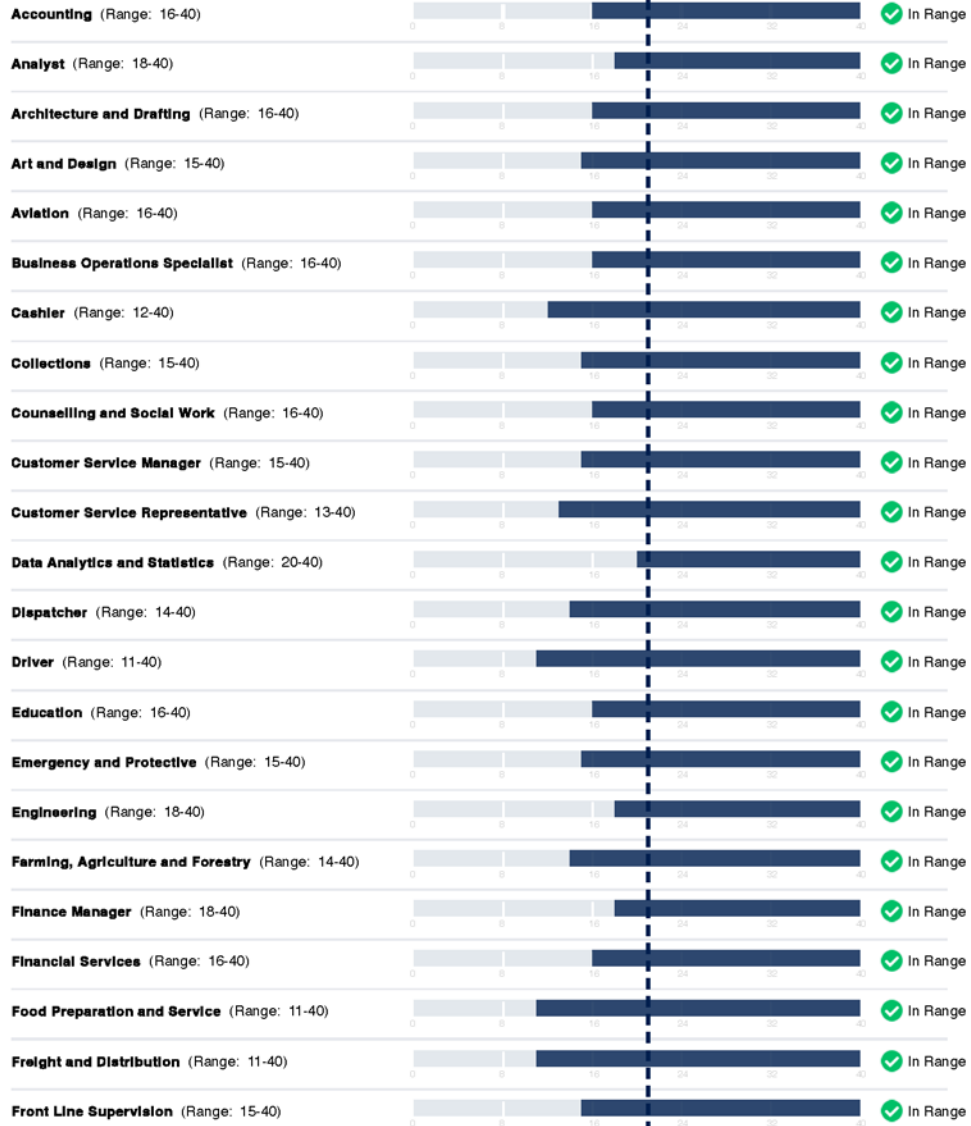


In the **Suggested Score Ranges by Position** section, you'll see how the candidate's raw score compares to all of the available score ranges for the UCAT.

Suggested UCAT Score Ranges by Position

*Based on national norms compiled by Criteria Corp.

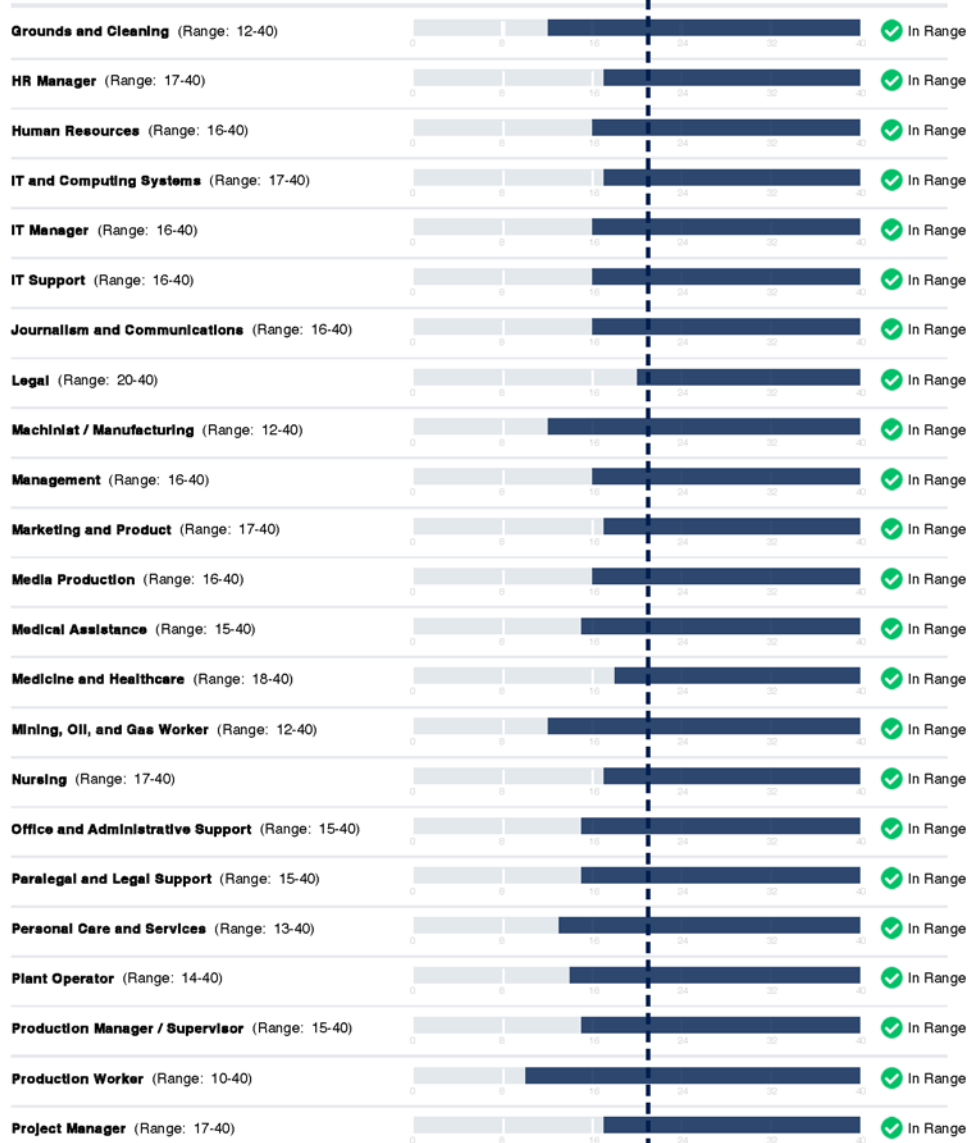
Vince Cicileo (Sample) | Score: 21



Suggested UCAT Score Ranges by Position

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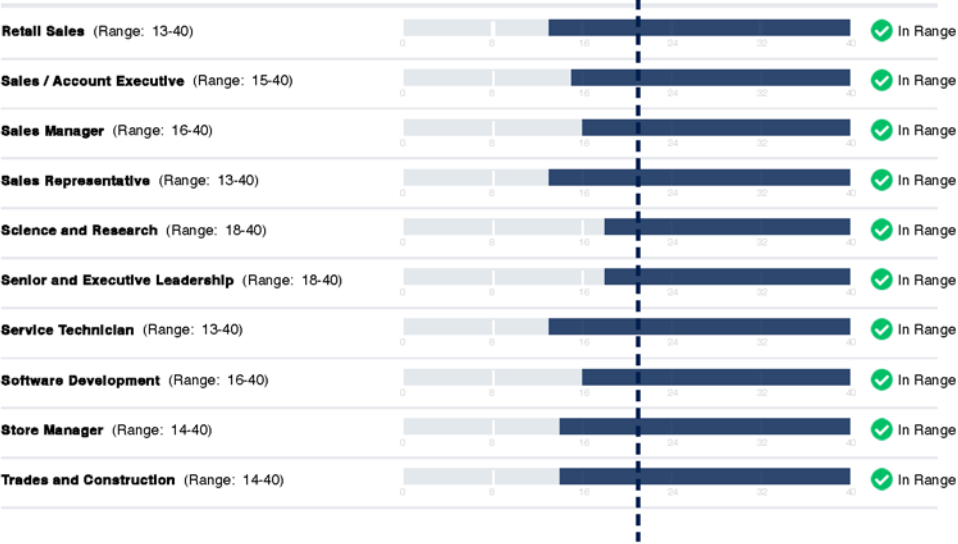
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Suggested UCAT Score Ranges by Position

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Psychometric properties

Normative sample

The normative group for the UCAT was developed using a sample of 10,223 individuals. The sample was made up of adults aged 18 and older, including both incumbents and job applicants. These individuals were being assessed for employee selection and/or benchmarking purposes, and represented a sample of individuals from hundreds of different companies whose current positions included managerial positions, technical services, customer service, and sales positions. The mean score for the normative sample is 22.18, and the standard deviation is 7.58.

Since the initial standardization sample, the UCAT has been administered over 1 million times. Based on the large volume of position-specific data that has been gathered on the UCAT, Criteria has established score expectations and score ranges for various occupations.

Reliability

Reliability typically refers to the internal consistency of a test, or the extent to which individual items on a test measure the same construct and result in similar test scores. The most common measurement of test reliability is Cronbach's alpha, a coefficient of reliability often referred to simply as the alpha coefficient.

The Cronbach's alpha for the UCAT is 0.90. Psychometricians generally consider alpha coefficients of .70 or above to constitute an acceptable level of reliability, while alpha coefficients of .90 or above constitute excellent test reliability.

Construct validity

Construct validity is established through evidence for convergence, or the relationships demonstrated between a test with other well-established tests that are purported to measure the same construct or attribute. The UCAT has demonstrated construct validity through its strong correlations with other leading measures of cognitive aptitude.

The UCAT was designed as a sister test of the CCAT, Criteria's most popular assessment, consequently the UCAT and CCAT have yielded strong convergent correlations. In a sample of 252 people who took both the CCAT and UCAT, there was a high correlation ($r = .80$) between CCAT and UCAT scores. The UCAT's convergence with the CCAT speaks to the overall validity of the tool compared to competing aptitude measures, as the CCAT has demonstrated convergent correlations of .78 with other leading aptitude measures, like the Wonderlic Personnel Test (WPT) for example.

Criterion-related validity

Criterion validity refers to the extent to which test scores relate to a relevant outcome such as job performance. The UCAT functions as an especially effective predictor of performance for jobs that require enhanced abilities in the areas of problem-solving, learning, critical thinking, and mathematical reasoning. Criteria Corp has conducted numerous criterion validity studies in collaboration with research partners and customers across many different industries. These studies have demonstrated evidence for the criterion validity of the UCAT in a wide variety of organizational settings. Examples of jobs for which the UCAT has high predictive validity include positions that require heightened problem-solving abilities without the need for exceptional verbal/writing abilities; like Software Engineers, Technicians, Logistics Specialists, and Construction positions. For example, among 101 client associates at an international technology company, performance on the UCAT correlated ($r = .40, p < .05$) with job performance ratings.

Cognitive Aptitude Case Studies

MacFab Manufacturing achieves a 90% hiring success rate with Criteria

[View case study](#)

Consumer finance company uses CCAT to lower hiring and training costs

[View case study](#)

Technology call center uses the CCAT to reduce turnover

[View case study](#)

SBMA reduced time spent hiring by 63%

[View case study](#)

Tech company improves performance of its software engineers

[View case study](#)

Schweiger Dermatology Group reduces turnover by 57%

[View case study](#)

Sales reps who pass the CCAT and EPP generate 7x more revenue

[View case study](#)

Consulting firm improves job performance and retention for analysts

[View case study](#)



