

**Overview**

*The Core 1 and 2 examinations are a mix of objective format and case questions. The maximum length for an individual case will be 60 minutes. The Core cases must assess the cross-competency integration, problem-solving and communication elements, which will be introduced in Core 1 (see CPA Competency Map for the competency areas being integrated). Core 1 case(s) will reflect mostly routine and low to medium complexity situations (some Core 1 competencies touch on non-routine and more complex transactions within GAAP), and provide candidates with sufficient direction to demonstrate an early level of professional skill development. Since the CPA program builds on prior learnings, Core 1 cases draw on the entry level requirements.*

**ATOMIC EXCELLENCE INC.****Suggested time (60 minutes)**

You, CPA, are a senior accountant at Danielson & Associates LLP, a mid-size firm specializing in the audit of smaller, high-tech companies. You have recently been assigned to a new client of the firm, Atomic Excellence Inc. (AEI), a publicly-traded Canadian company listed on the TSX Venture Exchange that has been in business for 15 years. AEI dedicates itself to serving the scientific community by providing powerful, easy-to-use, and affordable scientific software. The company's year-end is December 31.

Today is February 27, 2022. Your audit manager, Joel Cross, has called a meeting to discuss the work that needs to be performed before audit fieldwork can begin in two weeks:

“CPA, I could really use your help in preparing a preliminary audit plan. I have already performed the initial client acceptance procedures and I met with the former auditors last week to review the audit working papers from the prior year. I did not note any areas of concern. However, I did not have time to perform an assessment of the risk of material misstatement for this audit or to think about materiality yet. Some information you may need on the business is included in Appendix I.

“Additionally, please prepare a memo analyzing any new accounting issues that resulted from 2021 events that we should be keeping an eye for during our audit. (Appendix II). As you know, AEI reports under IFRS.”

**APPENDIX I  
KNOWLEDGE OF THE BUSINESS**

AEI helps scientists deal with huge amounts of data by providing software that will perform statistical analysis and identify trends. Science labs purchase individual modules (software) to match the different types of statistical analysis they want to perform. Each module costs anywhere from \$500 - \$5,000 depending on the complexity of the analysis required.

AEI has done very well with this business model, with profit before tax of approximately \$400,000 in 2020 and preliminary profit before tax of \$550,000 for 2021. Their sales tend to be very even throughout the year.

That said, the industry has many players and is highly competitive, as labs have limited grant funds to spend and are always looking for the fastest software, and therefore will switch providers if the pricing is more attractive or the software is more powerful.

## APPENDIX II EVENTS OCCURRING IN 2021

### Module Nuclear

At the request of several clients, AEI started “Module Nuclear”, a project on the development of a module specifically for nuclear plants. There was a need for software that would analyze data coming from nuclear reactors in real time to continuously assess the reactors’ condition. The timeline related to this project is as follows:

| <b>Date</b>                  | <b>Work completed on project</b>  | <b>Amount spent to date (cumulative)</b> |
|------------------------------|---|--|
| February 2021                | Project began   | -  |
| February 2021 – April 2021   | Various algorithms were explored to determine which one would be best for nuclear plants  | \$30,000                                 |
| April 2021 – July 2021       | One algorithm was chosen and programming for the module was done  | \$50,000                                 |
| July 2021 – August 2021      | Testing of the module. The module often crashed as it needed to provide real-time analysis, 24-hours a day, and this was AEI’s first time creating a module that constantly refreshes.  | \$ 5,000                                 |
| August 2021 – October 2021   | Continually testing different fixes to resolve the crashing issue. By mid-October, the programmers finally isolated the problem and developed a solution, which involved additional coding changes to the software. The changes were completed by the end of October. | \$15,000                                 |
| October 2021 – December 2021 | Programming to link the module to the shell.  | \$20,000                                 |

The project team expects the module to be finished within the first three months of 2022. The budget for the remainder of the project is \$30,000, \$25,000 will be spent on testing the software with various sets of actual client data, and \$5,000 will be used for advertising and hosting a client reception to unveil the new module. AEI has capitalized all expenses incurred on the project to date.

**APPENDIX II, continued**  
**EVENTS OCCURRING IN 2021**

Telephone support program

Up until 2021, none of the companies in the industry offered post-sales support to labs. In an attempt to provide better client service and to remain competitive, AEI introduced a new aspect to their modules. Starting January 1, 2021, when a lab purchases a module, they now receive a three-year helpline support service. The telephone support program provides them with access to a 1-800 hotline they can call 24 hours a day, 7 days a week for advice from a qualified statistician. To cover the costs of running the helpline, AEI increased their pricing on the modules by 10%. After three-years of support service, customers can decide to renew this service for another three years at the same price as included in the initial purchase package. As a result, AEI had sales of \$1,430,000 this year, representing a 20% increase in their revenues compared to the prior year, making it was clear that the market liked the new feature and was willing to pay extra for it. Had the modules been sold without the support service, sales would only have been \$1,300,000. At year-end, the full \$1,430,000 was received and recognized as revenue for the year.

Genetic Network Module

AEI's Genetic Network Module has been one of the company's top 20 modules in terms of sales. The company spent approximately \$240,000 in early 2020 on the development of this module and has been amortizing it over its estimated useful life of three years. In 2021, a competitor, Beta Gamma Corporation (BGC) came up with a stand-alone software which is very similar to AEI's module in terms of functionality. It can perform the data analysis in half the amount of time, although not with as much accuracy. When the BGC product came out, BGC offered to purchase AEI's Genetic Network Module for \$50,000. Since the introduction of the competitor software, AEI's sales of the Genetic Network Module have declined by 90%. At the end of 2021, the net book value of the deferred R&D costs related to this project is \$95,000.