

## **Aaron Jay Hinkle**

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geboren am **03.08.1984** in **Silverton, Vereinigte Staaten von Amerika**  
*born on 1984.08.03 in Silverton, United States of America*

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hat die Bachelorprüfung erfolgreich  
*has successfully passed the bachelor examination*  
im Studiengang **Mechanical Engineering (Focus Field Simulation and Validation)**  
*for the degree programme Mechanical Engineering (Focus Field Simulation and Validation)*


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gemäß der Prüfungsordnung vom 09.01.2018  
*in accordance with the examination regulations of 09<sup>th</sup> January, 2018*

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mit der Gesamtnote **2,2** bestanden.  
*with a final grade of 2,2.*

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**Professor Dr.-Ing. Stéphane Danjou**  
Vorsitzender des Prüfungsausschusses  
der Fakultät Technologie und Bionik

*Chairman of the Examination Board  
Faculty Technology and Bionics*

Kleve, den 23.03.2021

**Einzelergebnisse der Masterprüfung / *Programme details and individual marks obtained*****Aaron Jay Hinkle****Studienbegleitende Prüfungen / *Course Related Exams***

| <b>Module<br/>Modules</b>                        | <b>Kreditpunkte<br/>Credit Points</b> | <b>Note<br/>Grade</b> |
|--|---------------------------------------|-----------------------|
| <b>Introductory Mathematics</b>                  | <b>8</b>                              | <b>4,0</b>            |
| <b>Applied Mathematics</b>                       | <b>7</b>                              | <b>3,0</b>            |
| <b>Numerical Mathematics</b>                     | <b>5</b>                              | <b>4,0</b>            |
| <b>Physics</b>                                   | <b>5</b>                              | <b>2,3</b>            |
| <b>Chemistry of Materials</b>                    | <b>5</b>                              | <b>2,3</b>            |
| <b>Statics and Strength of Materials</b>         | <b>5</b>                              | <b>3,0</b>            |
| <b>Advanced Strength of Materials</b>            | <b>5</b>                              | <b>2,7</b>            |
| <b>Dynamics</b>                                  | <b>5</b>                              | <b>3,0</b>            |
| <b>Programming</b>                               | <b>5</b>                              | <b>Passed</b>         |
| <b>Business Economics and Project Management</b> | <b>5</b>                              | <b>Passed</b>         |
| <b>Cross-Cultural Management and Creativity</b>  | <b>5</b>                              | <b>Passed</b>         |
| <b>Group Project</b>                             | <b>5</b>                              | <b>Passed</b>         |
| <b>Metallic Materials and Testing</b>            | <b>5</b>                              | <b>3,0</b>            |
| <b>Non-metallic Materials</b>                    | <b>5</b>                              | <b>2,0</b>            |
| <b>Fundamentals of Electrical Engineering</b>    | <b>5</b>                              | <b>2,7</b>            |
| <b>Technology and Innovation Management</b>      | <b>5</b>                              | <b>Passed</b>         |
| <b>Entrepreneurship</b>                          | <b>2</b>                              | <b>Passed</b>         |
| <b>Introduction to Mechanical Engineering</b>    | <b>3</b>                              | <b>Passed</b>         |
| <b>Engineering Drawing and Design</b>            | <b>5</b>                              | <b>Passed</b>         |

| <b>Module<br/>Modules</b>                    | <b>Kreditpunkte<br/>Credit Points</b> | <b>Note<br/>Grade</b> |
|--|---------------------------------------|-----------------------|
| <b>Advanced Engineering Design</b>           | <b>5</b>                              | <b>1,7</b>            |
| <b>Product Design</b>                        | <b>5</b>                              | <b>2,3</b>            |
| <b>Manufacturing Technology</b>              | <b>5</b>                              | <b>2,0</b>            |
| <b>Quality and Production Management</b>     | <b>5</b>                              | <b>3,3</b>            |
| <b>Thermodynamics</b>                        | <b>5</b>                              | <b>2,0</b>            |
| <b>Drive Systems</b>                         | <b>5</b>                              | <b>4,0</b>            |
| <b>System Theory and Controls</b>            | <b>5</b>                              | <b>2,3</b>            |
| <b>Controls</b>                              | <b>5</b>                              | <b>2,0</b>            |
| <b>Modelling and Simulation</b>              | <b>5</b>                              | <b>1,7</b>            |
| <b>Electives</b>                             | <b>5</b>                              |                       |
| Condition Monitoring                         | 5                                     | 2,3                   |
| <b>Focus Field Simulation and Validation</b> | <b>20</b>                             |                       |
| Applied Strength of Materials                | 5                                     | 1,3                   |
| Multibody Dynamics                           | 5                                     | 3,0                   |
| Machine Dynamics                             | 5                                     | 1,0                   |
| Finite Element Method                        | 5                                     | 1,3                   |
| <b>Internship</b>                            | <b>30</b>                             | <b>Passed</b>         |

## **Bachelorarbeit / Bachelor Thesis**

### **Thema / Topic**

Design and Development of a Centrifugal Casting Machine and Investment Casting Process for HSRW

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### **1. Prüfer / Examiner**

Professor Dr. William M Megill

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### **2. Prüfer / Second Examiner**

Professor Dr. Niels Ostergaard

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| <b>Note der Bachelorarbeit / Grade of Bachelor Thesis</b> | <b>1,0</b> |
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| <b>Note des Kolloquiums / Grade of Colloquium</b> | <b>1,0</b> |
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| <b>Kreditpunkte gesamt / Total Credit Points</b> | <b>210</b> |
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