

CSEC Proposal

1. Introduction

1.1. Background

Computer Science and Engineering Club (CSEC) was initially established as International Competitive Programming Colligate (ICPC) Club. It operated under the supervision of the Computer Science and Engineering (CSE) Program and its main objective was to produce competitive students for the International Programming Contest that the club was named after. Thereafter, in the year 2010 the Computer Science and Engineering Club (CSEC) was formed with the recognition of the CSE program. But it was in 2011 the fundamental changes happened.

The main aim of this proposal is to get the club recognized by the University and the School of Electrical Engineering and Computing for better performance and outcome. As the club has many activities and events that benefit students, the university and its large community, proper attention will prove better results.

1.2. Mission

The missions of CSEC are the following:

- ❖ Supporting and bringing up students in their academics so that they can become problem solvers.
- ❖ To produce well competitive students that can participate at International and Nation events and competitions.
- ❖ Providing products and services to the ASTU community to ease life and work.
- ❖ To create opportunities for students so that they can show their capability and advance in their field of interest.

1.3. Vision

The visions of CSEC are the following:

- ❖ To form a Computer Science and Engineering Association in Ethiopia and help advance the field.
- ❖ To build the largest University based developer Community in the country.
- ❖ To produce Internationally competitive students.
- ❖ To establish fundamental connections with National and International organizations in the field.

1.4. What has been done so far?

CSE club has been around for a while now and in those moments, it has performed and delivered good results. Here are a few lists of the accomplishments the club has had so far:

- ❖ The club has produced students who have participated in the International Colligate Programming Contests representing the university and the country. The students who participated have shown a lot of progress and the University is currently placed first in the country.
- ❖ The club has provided software to the university that digitalize the existing systems of the university. The division of the club that focuses on software development is currently working on various projects that benefit the community.
- ❖ By utilizing volunteer students, the club has provided free tutorial sessions for pre-engineering students on the course *Introduction to programming* and for 2nd year electrical students on the course *Data Structure and Algorithm*. The club also runs a YouTube channel where it uploads tutorials on the courses mentioned above.
- ❖ The club has given tutorials on software programs and frameworks for students beyond what is taught in classrooms.

1.5. Importance of the Club

With a well-developed leadership and good experience behind it, the CSE club has a promising future that can benefit everyone in the community. The following points prove the very existence of the club is beneficiary for the ASTU community:

- ❖ With proper attention and support the club is capable of producing students who can go to the world finals of the International Colligate Programming Competition. And such opportunity will pave a way to establish the university as a pioneer in such events in the country and boost the motivation of students.
- ❖ With a vast potential, the University can benefit of the students and provide better service to the community.
- ❖ Improve the quality of the Learning process by using capable students.
- ❖ Extra-curricular activities involved in the club allow students to be focused in their academics and have better creativity.

1.6.Needed Resources

For the proper functioning of the club, numerous resources are needed. These resources vary in category and size. The crucial resources are listed as follows:

- ❖ Computer laboratories to perform trainings and activities. The laboratories are expected to have access to Internet.
- ❖ Meeting up venues to conducts meetings and events. This implies paving an efficient way for the club to utilize the venues in the university.
- ❖ Projector to conduct trainings and perform presentations.
- ❖ A Digital Camera to capture the club's activities and record tutorials to process and upload on the internet for the use of students.
- ❖ The university's cooperation to establish and strength relationship with National and International Organizations.

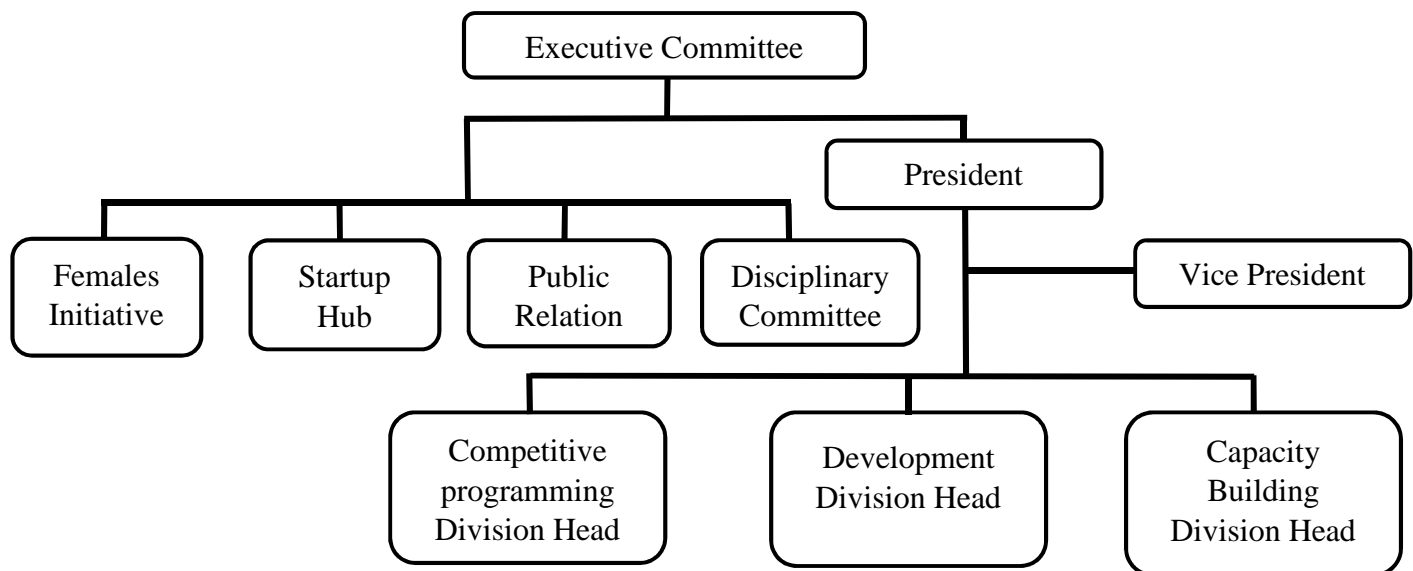
- ❖ An allocated budget for the club's activities and events to help the fluid flow of tasks.
- ❖ A server from the university to deploy software programs developed by students in the club for the ASTU community.

2. Structure and Functions

As of 2011 E.C. the club has had many reforms in structure. The club is divided into Divisions in which each division has a vital function to perform. There are also Special Committees that implement functions that help achieve the club's goals. The club also has a President and Vice President to organized the club's activities. The heads of each Division along with the President and Vice President form the Executive Committee of the club which is the highest deciding organ of the club.

2.1.Overall Structure

The overall structure of the club is as follows:



2.2.Functions of each Club Unit

2.2.1. Executive Committee

It is the highest deciding part of the club. It is composed of the President, Vice President and the heads of the three Divisions. The functions of the Executive Committee are the following:

- ❖ Performing any decisions that are regarding the club.
- ❖ The Executive Committee is responsible for overseeing the Special Committees.
- ❖ The Executive committee is responsible for approving the leaders of committees.
- ❖ The committee also sees evaluation of membership.

2.2.2. Divisions

The main activities of the club are performed via the divisions. There are three divisions in the club.

1. Competitive Programming Division

This is a division where members train and practice on how to solve problems by writing computer programming codes. The problems presented resemble real world problems. The submitted codes are evaluated based on the output they generated with given input. The main aim of this division is to produce competitive students who will participate in International Competitive Programming contests.

In this division members learn to do the following:

- ❖ Different problem-solving techniques.
- ❖ Different kinds of programming languages.
- ❖ Different kinds of algorithms.

The Competitive Programming Division has two sub divisions. These are:

- I. Contest Preparation sub-division:* Members of this sub-division will prepare contest questions and solutions.
- II. System Maintenance sub-division:* Members of this sub-division will maintain and explore the server and judge system that is used to conduct the contests.

2. Development Division

In this division students will develop and implement real systems that are beneficiary to the community. Being in teams, the members will work on projects assigned to them or projects they forwarded. The systems developed are evaluated by staffs of the CSE program. The main aim of this division is to produce students who are capable of producing problem solving systems and utilized the produced systems in the process.

In this division students learn the following:

- ❖ Different kinds of frameworks and system development tools.
- ❖ Techniques on how to work in a team, communicate and share data.
- ❖ The formal processes of making a fully developed system. This includes experiencing the proper life cycles of making a system.

The Development Division has four sub-divisions. These are:

- I. Application development sub-Division:* members of this sub-division build applications which can be executed on platforms such as web, desktop or mobile.
- II. Emerging technologies sub-Division:* members of this sub-division experiment with latest technologies like artificial intelligence, blockchain, machine learning, cryptocurrency.
- III. Hardware engineering sub-Division:* members of this sub-division develop embedded systems, designing hardware components or anything else which leans towards hardware.

IV. System development sub-Division: members of this sub-division build various systems on the top of ASTU portal so that it would which serves as a one-stop platform for campus wide systems.

3. Capacity Building Division

This division is all about supporting ASTU students with academics and giving community service. The members of this division are volunteers who preform various tasks to deliver service and tutorials. Further supported with the staff of the CSE program, the Capacity Building Division aims to create an environment to ease and support students in academics and give back to the ASTU community.

The members of this division learn the following:

- ❖ How to plan, conduct and give tutorials.
- ❖ How to produce and edit different kinds of multimedia.
- ❖ Conducting different kinds of experience sharing events and seminars.

The Capacity Building Division has four sub-divisions. These are:

- I. Seminar Organizing sub-Division:*** This sub-division organizes and conducts seminars in which students and CSE staffs share their experience to a wider audience.
- II. Tutorial providing sub-Division:*** This sub-division prepares and delivers tutorials for ASTU students. The main aim here is to support students with academics.
- III. Multimedia Production sub-Division:*** This sub-division is responsible for producing and editing different kinds of multimedia for the club. This includes tutorials, club activities and the like.
- IV. Community Service sub-Division:*** This sub-division gathers volunteers and conducts volunteer activities to the ASTU community. These activities include giving free services and products with the support of the University.

2.2.3. Special Committees

There are some tasks that can't be given to one division alone and which must be undertaken through out the club. These tasks are implemented through special committees. These committees report to the Executive committee directly. There are four Special committees in the club.

1. Females Initiative

This committee is dedicated to enhance the participation of females in the club. Through conducting events and activities, this committee create opportunity for females to join the club. This committee also ensures that gender equality is respected in all aspects and activities of the club.

2. Startup Hub

In many parts of the world Universities are the source of innovation and big companies. In accordance, the main aim of this committee is to organize students to produce their innovation and systems and link them with proper funding so that their products can join the market. This committee also tries to establish links with organizations.

3. Public Relation

The public relation committee handles all tasks involving events, notifications and communication within and outwards from the club. Whether it may be to call for a meeting or post a notification, all such related tasks are dealt with the Public Relation. The main goal of this committee is to assist the Vice President in the mentioned tasks. Thus, this committee is under the supervision of the Vice President. All the social media outlets of the club are also handled by this committee. Members of this committee also work with other Special Committees and Divisions whenever any of them want to conduct events.

4. Disciplinary Committee

Law and order are vital parts of any activity, and the part of the club that ensures there will be order is the Disciplinary Committee. This committee is responsible for ensuring that resources of the club are used properly. This includes making sure only members enter into the club computer laboratories in allowed time. And in any event or activity, members of this committee supervise whether members of the club are abiding by the constitution, rules and regulations of the club. In any case of misbehavior by a member of the club, the Disciplinary Committee may forward this case to the Executive Committee for evaluation.

3. Constitution of Computer Science and Engineering Club

Preamble

This is the constitution of the Computer Science and Engineering Club (CSEC).

We students of Adama Science and technology University and members of CSEC are fully committed and determined to abide by this constitution.

We are fully convinced that by implementation of this constitution that ensures the development and growth of the club and ourselves.

Therefore, we have adopted this constitution on _____ by the representatives we have elected.

Chapter One

GENERAL PROVISIONS

Article 1: Nomenclature of the club

1. This constitution establishes the fundamental structures and responsibilities in the club. In accordance, the club shall be known as Computer Science and Engineering Club (CSEC).

Article 2: Overseer and supervisor of the club

1. The activities of the club are supported and supervised by an advisory board consisting of staffs of the Computer Science and Engineering Program.
2. This advisory board is a part of the CSE program Capacity Building Team, and assigning of staffs for the board is done by the Capacity Building Team.
3. **The Overseer of the club is the Head of the Computer Science and Engineering Program.**

Chapter Two

Structure of the Club

Article 3: Overall Structure

1. The club shall be comprised of Divisions which implement its activities.
2. The club shall have an Executive Committee as the highest decision-making body with the President below it.
3. The club shall have a President and Vice President to coordinate the overall activities of the club.
4. The club shall have heads for all Divisions to carry out activities in the respective Division.
5. The Club shall have Special Committees to carry out specific important tasks.
6. Each Division of the club shall have Committees of its own to carry out activities within it.

Article 4: Divisions of the club

1. Division of the CSE Club are of the following:
 - Competitive Programming Division
 - Development Division
 - Capacity Building Division

Article 5: About Competitive Programming Division

1. Competitive Programming Division of the club works on preparing members to be well experienced to participate in programming competitions.
2. The sub-divisions of the Competitive Programming Division are the following:
 - V. Contest Preparation
 - VI. Contest System Maintenance

Article 6: About Development Division

1. Development Division is focused on producing students who are able to produce systems that solve the problems of the community and also the division utilizes the products made in the process,
2. The sub-divisions of the Development Division are the following:
 - VII. Application development sub-Division
 - VIII. Emerging technologies sub-Division
 - IX. Hardware engineering sub-Division
 - X. System development sub-Division

Article 7: About Capacity Building Division

1. Capacity Building Division is a part of the club that focuses on supporting students of ASTU academically and providing volunteer service to the community of ASTU.
2. The sub-divisions of the Capacity Building Division are the following:
 - XI. Seminar Organizing sub-Division
 - XII. Tutorial providing sub-Division
 - XIII. Multimedia Production sub-Division
 - XIV. Community Service sub-Division

Article 8: Special Committees

1. The Special Committees that operate independent of any division hence their tasks are implemented throughout the club. There are four Special Committees. These are:
 - Females Initiative
 - Startup Hub
 - Public Relation
 - Disciplinary Committee
2. The heads of the Special Committees are responsible for organizing the tasks done by that committee.
3. The heads of Special Committees must have a CGPA of at least 3.0.
4. Special Committees can't register new members on their accord. They can only utilize existing members of the club.

Article 9: About Females Initiative

1. The Females Initiative Special Committee is focused on encouraging females to participate on club activities.
2. The head of this committee must be a female.
3. The committee must consist of only 5 members including the head of the committee.
4. The tasks performed in this committee are limited to:
 - Keeping an organized list of female members of the club.
 - Contacting female members to inform and invite to any event.
 - Planning and organizing events to encourage females.
 - Forwarding cases of any gender inequality to the Executive Committee if seen in any events of the club.

Article 10: About Startup Hub

1. The Startup Hub committee is dedicated on supporting students to deliver products that can join the market. Its main goal is to create a developers Community in the University.
2. This committee must consist of only 5 members including the head.
3. The tasks performed by this committee are limited to:
 - Keeping an organized list and coordinating members of the club who have systems or ideas of real systems that are feasible to implement.
 - Contacting bureaus, organizations and companies at University, National and International level.
 - Following up on the works of the students in the Startup Hub and reporting to the Executive Committee.
 - Forwarding requests of all needed resources to the President.

Article 11: About Public Relation

1. The Public Relation Special Committee handles all issues regarding events and notifications. All Social Media outlets of the club are handled by this committee.
2. The public relation committee is under the supervision of the Vice President. The Vice President may forward orders and directions to the head of this committee.
3. This committee can only consist of 10 members including the head.
4. The tasks performed in this Special Committee are limited to:
 - Keeping an organized list of all members of the club.
 - Posting notifications and contacting members of the club whenever necessary.
 - Working with other Special Committees and Divisions whenever there is an event.
 - Securing Venue for meetings, events and activities.
 - Managing all Social Media outlets of the club.

Article 12: About Disciplinary Committee

1. The Disciplinary Committee is devoted to establish law and order in the club. It ensures that the constitution, rules and regulations of the club are respected by all members of the club.
2. This Special Committee must consist of only 15 members including the head.
3. The tasks performed under the Disciplinary Committee are limited to:
 - Ensuring only members of the club use the available resources at allowed time.
 - Supervising the behavior of members in any event and activity.
 - Forwarding any case of misbehavior by a member to the Executive Committee.
 - Working with the Public Relation on organizing events on the day of that event.

Chapter Three

Membership

Article 13: Club Membership

1. For a student to be a member of the club, one has to be a member of one of the divisions of the club.
2. For a student to be a member of the club, he/she has to fulfil the minimum grade requirement. The minimum requirement is:
 - 2.75 CGPA for Male students.
 - 2.5 CGPA for Female students.

Article 14: Membership of Divisions

1. For a student to be a member of one of the divisions of the club, he/she has to pass the entrance exam and evaluation prepared by that divisions committee.
2. Any student must fulfill the minimum grade requirement stated by **Article 9, sub-Article 2**.
3. Any student of Adama Science and Technology can join Development and Capacity Building Divisions. This includes both undergraduate and postgraduate students.
4. Only undergraduate students can join the Competitive Programming Division.

Article 15: Evaluation of Membership

1. The membership of every member of CSE club is evaluated every 6 months. Any member who fails to meet the minimum requirement placed for the division he/she is in, will have his/her membership revoked permanently.
2. After the revocation of membership if that students wants to rejoin the club, then he/she has to register again and pass through the required process and get evaluated as if he/she is joining for the first time.

Article 16: Privileges of Members

1. Members of the CSE club can use the available labs and resources under the club in the allowed time.
2. Based on their participation members of the club receive certificates to acknowledge their work.
3. Members can elect the heads of their division, the vice president and president of the club.

Article 17: Participation of members

1. Any member of the club may participate to any number of Divisions he/she likes as long as he/she maintains the minimum requirement placed for all the Divisions he/she participates in.

Chapter Four

Executive Committee

Article 18: Definition of the Executive Committee

1. The executive committee of the club is composed of the President, Vice President and the Heads of the three divisions. It is the highest deciding authority in the club.

Article 19: Responsibilities and Functions of the Executive Committee

1. The evaluation of the membership status of all members are seen by the executive committee if the cause is if a member didn't fulfill the minimum requirements or has disciplinary issues.
2. The Executive Committee evaluates and approves the plan forwarded by the President of the club.
3. The Executive Committee is responsible for preparing strategies depending on the club's plan and ensuring the effectiveness of the plan.
4. The executive committee has the responsibility of approving the sub-division representatives for each division after the candidates are forwarded by the respective division head.
5. Even though they operate autonomously, the Executive Committee may pass any decision or intervene in the operation of any Division.
6. The Executive Committee has the responsibility of approving the leaders of the Special Committee after the candidates are forwarded by the president.
7. The Executive committee oversees the progress of all Special Committees. The Executive Committee may pass any decision or intervene in the operation of the Special Committees.

Article 20: Responsibilities and Functions of the President

1. The President is responsible for monitoring the progress and activities of each division.
2. The President is responsible for overseeing and providing the requests for resources forwarded by Division heads and Special Committees.
3. The president is responsible for preparing the semi-annual and annual plan of the club and presenting to the executive committee.
4. The President calls and sets agenda for the meeting of Executive Committee.
5. In the presence of resource and interest collusion between Divisions the president may interfere to alleviate the situation.
6. The President has a veto power in the Executive Committee. This veto power is only to block any decision that the President doesn't agree with. Even if the 4 members of the Executive Committee agree to a decision, the president has the veto power to block that decision. This veto power does not give the President to pass any decision on his/her accord without the support of the Executive Committee.
7. The President can nominate leaders of the Special Committee and forward to the Executive Committee.

Article 21: Responsibilities and Functions of the Vice President

1. In the absence of the president the vice president shall bear the responsibilities of the president.
2. The vice president of the club must perform any tasks delegated to him/her by the President.
3. The internal and external relations are monitored by the vice president. Notices, announcements and events are organized and processed through the Public Relation Committee which is under the direct supervision of the vice president.

4. The vice president also serves as the general secretary of the club and performs the activities of taking minutes in the executive committee meeting.

Article 22: Responsibilities and Functions of the Heads of Divisions

1. The head of each division is responsible for planning and organizing the activities of the division according to the approved club plan.
2. He/she can autonomously decide on any affairs regarding the division he/she is elected for.
3. The head of a division can forward nominees for leaders of the sub-divisions to the Executive Committee.
4. The head of a division is responsible for monitoring the status of any sub-divisions in that division.
5. The head of a division can request any resources needed in the activities of the division.

Article 23: Chain of Command

1. As the head of the club, the President may implement his decisions within the boundary given to him by this Constitution.
2. In the case of urgent event and when the Executive Committee can't gather for a meeting, the President may pass his decision to alleviate any situation.
3. In the absence of the President, the next person in command is the Vice President.
4. In the absence of both the President and Vice President. The heads of the three Divisions are the persons responsible for the club. The President has to rank the heads of Divisions to decide who becomes responsible first in such case.

Chapter Five

Election of the Executive Committee

Article 24: The Length of term for Executive Committee

1. The length of the term for each member of the executive committee is one year.

Article 25: Eligibility for election of Executive Committee

1. Any member of the club is eligible to be elected as a member of the Executive Committee as long as he/she has been a member of the club for at least one year.
2. Any member of the club is only eligible to be elected as a member of the Executive Committee if he/she has a CGPA of at least 3.25.
3. Any member can be a member of the Executive Committee for only two times. No student can serve as a member of Executive Committee more than two years.

Article 26: Period of Election

1. The five members of the executive committee are elected at the last month of an academic year.

Article 27: Precedence of the Election Process

1. Among the Election of the Executive Committee, the first election should be held for the President and Vice President. After that the election of the Heads of divisions should be held separately.

Article 28: Prerequisites for election of President and Vice President

1. The President and Vice President are elected in a general assembly of all members.
2. At most 8 candidates are forwarded for the election.
3. Each division must present 2 candidates for election, both of which must have a CGPA of at least 3.25. And one candidate must have a CGPA of at least 3.5.
4. Two candidates are also elected from the existing Executive Committee to be presented to the election. The Advisory Board of the club select the two candidates.

Article 29: Election of the President

1. Only the nominees having at least a CGPA of 3.5 from the candidates stated in **Article 22** are eligible to be elected as the President of the club.
2. The general Assembly then elects from the candidates. Each member has only one vote.
3. The candidate having the highest vote becomes the President of the club.

Article 30: Election of the Vice President

1. The remaining candidates are eligible to be elected as the Vice President of the club.
2. The general Assembly then elects from the candidates. Each member has only one vote.
3. The candidate having the highest vote becomes the Vice President of the club.

Article 31: Election of the Heads of Divisions

1. Candidates are presented for the election of the head of a division. All candidates must have a minimum CGPA of 3.25.
2. The assembly of a division can then elect its head. Each member has only one vote.
3. The candidate having the highest vote becomes the Head of the respective division.

Article 32: Absence of eligible candidates

1. In the absence of eligible candidates for election, the Advisory Board assigned by the CSE program will forward candidates for election regardless of their grade.

Chapter Six

Miscellaneous Provisions

Article 33: Maximum number of responsibilities

1. A member of the club can only participate and lead one position at the club. This mean a single person can have only one role as head or leader of any position.

Article 34: Revocation of power

1. Each Executive Committee member must present a progress report to the Advisory Board every two months.
2. If a member of the Executive Committee is seen as underperforming, the Advisory Board can call for a general Assembly and elect a new person for the respective position.
3. The Advisory Board may intervene and make reelection for at most two times in a year for each member of the Executive Committee.
4. If 4 members of the Executive Committee agree, they can report the remaining 5th member to the Advisory Board for evaluation if they see him/her to underperform. This is to allow the evaluation of members of the Executive Committee without waiting 2 months.

Article 35: Amendment of the Constitution

1. The amendment of this Constitution is only possible through the consent and agreement of the Executive Committee and Advisory Board.
2. Any modification in the Constitution must be welcomed unanimously by the Executive Committee first.
3. Thereafter the changes must be accepted by the Advisory Board by majority vote.

Article 36: Version with final Authority

1. In any case of disagreement, the English version of the Constitution of the Computer Science and Engineering Club is the final version with authority.

4. Signatures of Members

[illegible]